The Mining Journal

RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 607.—Vol. XVII. LONDON, SATURDAY, APRIL 10, 1847. [Price 6d.

MINING MATERIALS FOR SALE, BY PUBLIC AUCTION, on WHEAL ST. CLEER MINE, near LISKEARD, Cornwall, on Tuesday, the 13th April next, the following valuable

MINE MATERIALS:

A single-acting PUMPING STEAM-ENGINE, cylinder 30 inches diameter, 9-feet stroke, equal beam, with 7-ton boiler, cisterns, &c. &c., complete, in excellent condition, being nearly new.

27 9-feet 10-inch pumps	1 4-feet 6-inch clackdoor-piece
2 9-feet 10-inch matching pieces	1 11-feet 11-inch plunger-pole, with cast Stuffing-box and gland-pieces, tapdoor-piece, and windbore to match
6 9-feet 7-inch pumps	1 9-feet 10-inch windbore
1 12-feet 9-inch working barrel	2 6-feet 7-inch ditto
1 10-feet 9-inch ditto	
1 12-feet 6-inch ditto	
1 3-feet 10-inch clackdoor-piece	

About 40 fathoms of 8-inch main-rod, and about 10 fathoms of 7-inch ditto; 6 sets of rod-plate, rod-pins, bucket prongs, and hoops.

About 25 fathoms of 1¾-inch round iron bucket-rods: 10 fathoms of 1¼-inch ditto.

Iron set-offs, staples and glands, capstan, shears, balance-bob, horse-whim, and shaft tackle, &c.

About 60 fathoms of 12-inch capstan rope; 50 fathoms of 7-inch ditto; 70 fathoms of 3½-inch ditto, with a quantity of small ditto.

Two cwts. of 5-inch gasket, 1 cwt. of hemp, ¾-inch and ⅝-inch chain, horse-whim kibbles, winze ditto, 36-gallon water-barrel, ladders, air-pipes, launders, cisterns, and a quantity of new and old timber, carpenter's bench, miner's chest, &c.; 2 smith's bellows, 28 and 30-inches; anvil, vice, a set of screws, tap-plates, smith's house, screwing stock, smith and miner's tools, Mister and gad steel, and a quantity of new and old iron, counthouse furniture, &c. 1

For view, apply to Capt. Theophilus Michell, on the mine; and for further particulars, to Mr. W. Rendle, the purser, 13, Octagon, Plymouth; or Mr. William Murry, auctioneer, Liskeard.

FORTY-TWO INCH CYLINDER ENGINE AND OTHER VALUABLE MINING MATERIALS FOR SALE.—Mr. PRYOR has received instructions to OFFER FOR SALE, BY PUBLIC AUCTION, at NORTH DOWNS MINE, in the parish of REDRUTH, on Tuesday, the 13th of April inst., at Eleven o'clock in the forenoon, the following valuable

MINE MATERIALS—viz.:

1 42-in. cylinder ENGINE, 9 ft. stroke in shaft, with boiler, about 10 tons	4 pair of large cape rod plates
2 horse whims	1 12-in. 11-feet working barrel
2 balance bobs	1 12-in. 10-ft. ditto
2 pair of blocks	1 11-in. 10-ft. ditto
14 13-in. 9-ft. pumps	3 9-in. 9-ft. ditto
40 10-in. 9-ft. ditto	3 7-in. 9-ft. ditto
22 9-in. 9-ft. ditto	1 12-in. 6-ft. clack door-piece
1 15-in. 6-ft. ditto	1 12-in. 9-ft. ditto, and windbore
2 capstans and shears	1 11-in. 6-ft. door-piece
1 11-in. capstan rope	2 8-in. 6-ft. ditto
1 8-in. ditto	1 7-in. 6-ft. ditto
70 fathoms of 12-in. rods	2 9-in. H-pieces, top door pieces and windbores complete
70 fathoms of 8-in. ditto	1 11-in. 6-ft. windbore
150 fathoms of horizontal rods 2-in. round iron	3 9-in. 9-ft. ditto
	2 7-in. 9-ft. ditto
60 fathoms ditto, 1¼ in.	3 9-in. 6-ft. bucket clack door pieces
60 fathoms of 1-in. pump rods	1 9-in. 6-ft. bucket door piece
13 pair of 6-in. rod plates	1 11-in. 10-ft. plunger pole
4 pair of 7-in. ditto	2 9-in. 10-ft. ditto
16 pair of 5-in. ditto	1 8½-in. 8-ft. 6-in. ditto

Two winches, staples and glands, scar and barrel pins, new and old wrought iron, ditto cast-iron, chain, bucket brasses, prongs, three smiths' bellows, three pair of yokes, 40 fms. of engine-shaft ladders, junk, old kibbles, and palleys of various sizes.

To view the above materials, apply to the agents on the mine; and for any further information to the Auctioneer.—Dated Comford, April 1, 1847.

ON SALE, BY PRIVATE CONTRACT, at the PROVIDENCE MINES, near ST. IVES, an excellent 30-inch cylinder STEAM PUMPING-ENGINE, with boiler, about 7 tons.—For duty performed, see *Lean's Reporter*, 1844 and 1845.

50 fathoms 9-inch PUMPS, 30 fathoms 8-inch ditto, and other sizes.
1 11-inch doorpiece, 1 8-inch ditto.
1 8-inch working barrel, 1 6¾-inch ditto.

Rod-plates, fend-off bobs, rod-shieves, whim-shigves, shaft rollers, bucket-door, windbores, and a variety of other articles.

Apply to Capt. Penberthy, on the mines; or Samuel Higgs and Son, Penzance. Dated March 10, 1847.

STEAM COAL.—PARTNER WANTED in WINNING a COAL-FIELD, in NORTHUMBERLAND, comprising upwards of TWO THOUSAND ACRES of first-rate STEAM COAL, similar to the "West Hartley."

Apply to Mr. Francis Turner, colliery viewer, 9, Regent-terrace, Newcastle-on-Tyne.

A VERY IMPORTANT INVESTMENT—SOUTH STAFFORDSHIRE.

MINES OF COAL, IRONSTONE, AND LIMESTONE, at BENTLEY, between WOLVERHAMPTON and WALSALL.

TO BE LET, and may be ENTERED UPON and SET to WORK IMMEDIATELY, the

BENTLEY IRON-WORKS,

AND MINES OF COAL, IRONSTONE, LIMESTONE, SAND, AND FIRE-CLAY.

The IRON-WORKS consist of FOUR BLAST-FURNACES, with TWO BLAST-ENGINES, with all the necessary apparatus for heating the blast, upon the most improved principle: a large and extensive FOUNDRY, with powerful cranes, pipe pits, stoves, air-furnace, &c., with smiths' shops, pattern-makers' shops, HIGH-PRESSURE ENGINE, for working a boring-mill, lathes, &c.

Together with the MINES of COAL, IRONSTONE, LIMESTONE, SAND, and FIRE-CLAY, and RED BRICK CLAY, lying under about 511 acres of land—all in a ring fence, without any intermediate property, and adjoining the blast-furnaces, upon which is now erected a large and valuable water, or mine, engine, of sufficient power to drain the whole of the mines. Also, FIVE WINDING-ENGINES, with numerous shafts sunk down to the various mines, which consist of—

Coals.	*Ironstones.*
THE HEATHEN	THE BINDS
THE THREE-FEET	THE BLACK GUBBIN
THE FIVE-FEET	BROWNSTONE
THE FIRE-CLAY	NEWMINE
THE BOTTOM	ROUGH HILL, or ROBIN
	BOTTOM GUBBIN
	BLUEFLATTS
	SILVERTHREADS
	DIAMOND

The limestone, which has been sunk down to and worked, is of the same description as that found at Dudley and Walsall, and consists of two beds—one about four yards thick—of first-rate quality, for the use of iron-works; and the other about 10 yards thick, also well adapted for iron-works, building, or agricultural purposes. The fire-clay has been proved to be of equal quality with that of Stourbridge.

The mines of ironstone, called the "Bluestarts," and "Bottom Gubbin," are too well known, by parties acquainted with the neighbourhood, to require comment.

The mine of ironstone, called the "Brownstone," is identical with the black-band of Scotland, which has been one of the principal means of raising the iron trade there to its now high position; and, with a limited exception, is not found in the South Staffordshire district, except in the Bentley estate, and is now being conveyed several miles to the less fortunate parts of the district to be smelted.

The mines of coal are of that nature which well adapt them for the use of iron-works, either in the blast-furnace, foundry, or forge.

All the mines of coal and ironstone are now being worked, either upon the other parts of the Bentley estate, or in the immediate neighbourhood, and can be viewed at any time.

The property is well provided with canal and railway communication. The Anson branch of the Birmingham Canal commences within a few yards of the blast-furnaces. The Wyrley and Essington Canal, and the London and North-Western Railway, pass over the estate.

The iron trade being very prosperous, with every probability of remaining so for many years, parties wishing to embark in it have an opportunity here which is very seldom met with. The works may be entered upon immediately and put into operation, without having to contend with all the tediousness which always, more or less, accompanies new undertakings.

It is a well-known fact, that there are but few tracts of valuable coal and ironstone property now to be met with in South Staffordshire, and several of the first ironmasters of the district have availed themselves of an opportunity of taking several large tracts of similar mines from the Bentley estate, and are now at work upon them.

A plan of the property, and sections of the mines, may be seen, and any further information obtained, by application to Messrs. Vizard and Lomax, solicitors, Lincoln's Inn-fields, London; Messrs. White, Broughton, and White, solicitors, 12, Great Marlborough-street, London; Messrs. Ingleby, Wragge, and Cope, solicitors, Birmingham; Harvey Wyatt, Esq., Acton-hill, near Stafford; and Mr. James George, mine surveyor, Bentley, near Walsall, Staffordshire.

LARGE PUMPING-ENGINE.—TO BE SOLD, BY PRIVATE CONTRACT, at GODOLPHIN MINES, Helston, Cornwall, one 60-inch pumping-engine, 10-feet stroke in the cylinder, and 8 feet in the shaft, with three tubular boilers of about 25 tons, a balance-bob and top-piece of rod to each. This excellent engine was erected by one of the first engineers in the county; the air-pumps are lined with brass, and the whole of the machinery possesses great strength and durability. It has done a "duty" equal to the first in Cornwall, and is well worth the attention of any gentleman or company requiring such a powerful machine. The engine will be sold with or without the boilers, balance-bobs, &c., as may best suit the purchasers.

Application to be made to Capt. R. Williams, on the mines.
Dated Godolphin Mines, Helston, Cornwall, February 25, 1846.

TO CAPITALISTS.—A valuable COAL MINE, on the BANKS of the DEE, in a most advantageous position, through which the Chester and Holyhead Railway passes, is to BE DISPOSED OF; or the present proprietor is willing to WORK it in PARTNERSHIP, with a party providing the necessary capital, which will yield a handsome return, and prove a safe investment.

The present proprietor, knowing, from the experience of some years (during which he has worked the colliery to a moderate extent), the capabilities of it, can speak with confidence as to its resources—and as to its increasing value, there can be no doubt; for, in addition to the great local demand for lead smelting, &c., the facilities for shipment per River Dee—the completion of the Chester and Holyhead Railway—will almost immediately open a communication with the rising town of Birkenhead, from which, in addition to the local consumption, a large export trade may be expected.

The coal is of excellent quality, lying in seams of good workable thickness, and at a moderate depth, and the quantity almost unlimited, under a large tract of land, secured by lease. The present lessee is taking this step solely from want of the capital necessary to work the colliery to advantage, and avail himself of its great natural resources; the amount required for which will not exceed £10,000, and for which a return of at least 20 to 25 per cent. may be looked.

For further particulars apply to "F. M. C." (who will be in town in a few days), at Messrs. Crossman, Sommers, and Co., Mining Adventurers' Subscription Room, No. 28, Threadneedle-street; or Messrs. Bailey, Shaw, and Smith's, solicitors, No. 5, Berners-street, Oxford-street, London.

MINERAL FIELD IN MID-LOTHIAN.—TO BE LET, for such term of years as may be agreed on, the COAL, LIMESTONE, and IRONSTONE in the LANDS of DUDDINGSTONE and BRUNSTAIN, in the county of MID-LOTHIAN, the property of the Most Noble the Marquis of Abercorn.

The coals consist chiefly of what are termed the Edge Seams of Mid-Lothian, which are numerous, and of various thickness and quality—some of them containing Gas, or Parrot Coal. There is also reason to expect, at Duddingstone, Black-band and Ironstone, such as have been found at Dryden and Greeniaw, in the same range of coals; and Limestone has been worked on the estate.

The near vicinity of this coal-field to the city of Edinburgh and the town of Portobello, and the direct access by Railway to Edinburgh, as well as to the ports of Leith and Fisherrow, render it peculiarly advantageous for a colliery.

An engine-pit has been already sunk to a considerable depth at Magdalene-bridge, where it is understood to have reached within about 20 fathoms of the Jewel Coal; and an inclined plane mine, in one of the Edge Seams of Coal, has been extended at Joppa—in which mine coal-wall was prepared and ready to work; but both operations have been suspended since the death of the late tenant, and the pit and mine are thus at present filled with water; but the steam-engine and machinery, which were erected by the late tenant, are still on the property (and may be had at a valuation by a tenant), readily commanded the water when the works were in progress.

The collieries will be shown by Mr. Allan Livingstone, Joppa; and for particulars application may be made to Messrs. Bald and Geddes, mining engineers, 40, Albany-street, Edinburgh, with whom are the plans and sections of the coal-field.

Edinburgh, April, 1847.

MINERAL PROPERTY IN CARDIGANSHIRE.—TO BE DISPOSED OF, a FREEHOLD ESTATE, within 16 miles of ABERYSTWITH—a desirable property, in the centre of a rich mining district; or the MINERALS would BE SET, at moderate DUES or ROYALTY.—Specimens of the lead ore extracted may be seen, and every information obtained, on application to Mr. Benjamin Cook, Bradford-street, Birmingham; or to Mr. H. English, mining engineer, 25, Fleet-st., London.

MERIONETHSHIRE.—TO BE LET, for a term of years, a MINING SETT, containing several highly mineral lodes, and particularly one of a very pure graphite (black lead)—explored to no considerable depth; has been analised by the first mineral chemist of the day, and pronounced worthy of a trial to a greater extent, which can be done at small expense, by parties requiring this article.

For particulars apply to Mr. James Jones, Dolgelly, North Wales.

CAMBRIAN ANTHRACITE IRON COMPANY.
(PROVISIONALLY REGISTERED.)

Capital £200,000, in 20,000 shares, of £10 each.—Deposit 1s. per share, pursuant to 7 and 8 Victoria, cap. 110.

On formation of the company, a call of £1 per share to be made—the remainder (if necessary) in instalments, not exceeding 10s. per share.

It is proposed to apply for an Act of Incorporation for various powers, and to limit the liability of the shareholders.

An agreement has been entered into for the leasing of considerable mines in the western portion of the South Wales Mineral Basin, together with the machinery, steam-engine, railroad, trams, canal barges, &c., at a very reasonable rate. The public are invited to inspect the maps and sections of the mines, and the estimates and calculations of working the same, at the offices of Mr. Towse, solicitor, 24, Laurence Pountney-lane, City, where applications for shares may be made, and further information obtained.

GEORGIA TIN MINES, divided into 2048 shares, and worked *ON THE COST-BOOK SYSTEM*.

The necessary arrangements having been made for carrying out the operations of the company, all future communications are requested to be addressed to the offices of the company, 21, THROGMORTON-STREET, LONDON, where the specimens and plans, with the correspondence, may be seen.

BRYNYREGLWYS SLATE AND SLAB QUARRIES,
MERIONETHSHIRE.

April 10, 1847.—In six months hence, WILL BE OFFERED to the PUBLIC,

TWO THOUSAND FOUR HUNDRED SHARES;

(the whole number in the concern being 5000), the remaining 2600 to be retained by the proprietor.

The above slate and slab quarries have been leased to Mr. John Pughe, of Aberdovey, two years ago, for the term of 50 years, at a small fixed rent, and, in other respects, on very reasonable terms. From the commencement the said proprietor has been removing coverings of peat and earth from the surfaces—driving levels, making roads, bridges, and other conveniences, as well as digging for, and obtaining great quantities of, slates and slabs, of the first-rate qualities. The veins in these quarries are the celebrated Aberllefeny, which are known to be equal to the best in the kingdom, in point of wear—part of the mansion of Green-fields, in Machynlleth, the residence of Sir John Edwards, Bart., having been covered by them more than a century since; and, from that time to the present, no ladder has been required to be placed on it for repairing or fresh-making. The colour of Brynyreglwys slate and slabs is a beautiful light blue; the split is superior, and manageable to any thickness—and so even, that it cannot be excelled; they rise in the rocks generally from 2 ft. to 8 ft. in length, and from 1½ ft. to 4 ft. in breadth; they have gone through the ordeal of frost, snow, rain, fire, and sun-heat—sustaining all with perfect indifference. The proprietor is now preparing a large building, to contain many machines for sawing, planing, and turning, and will then be able to produce, at the quarries, specimens of the first-rate qualities, in tomb-stones, chimney and mantel pieces, tables, and all other articles, large and small, equal to any quarry in Wales. The said proprietor does not wish, or intend, to receive a shilling of any person's money for or on account of shares, before he has, by himself, or a thorough judge in the trade, viewed and examined the quarries and their produce.

There are two powerful streams of water running through the works, capable of, and are being brought into one body for, working water-wheels for the concern, which are now in a state of preparation. Such streams never fail of a sufficient supply for great works—always ready to act with full power, and the rocks ready also to produce any quantity for a time, beyond the power of imagination, in length, breadth, and depth combined. A road, for conveying the produce, is intended very soon to be commenced—the distance from the quarries to the edge of the River Dovey being short of four miles; from that spot they will be taken in boats to a wharf at Aberdovey, at the expense of 18d. per ton, where vessels, of several hundreds of tons, can take their loading—so with voice, hearts, and hands, proceed the quarries will.

The only reasons the proprietor has in parting with any shares, is infirmity of body and increase of age. Within the distance of a mile is a wonderful advantageous place, where from a tunnel may be driven to, and under, an immense depth below the quarries—should the proprietor, or a company, at some time hence, come to a determination to do so.

Should any personal applications, or inquiries, be made (post-paid) with the proprietor, Mr. John Pughe, Brynawel, Aberdovey, in the interim, he will be happy to give every further information on the subject.

MERIONETHSHIRE SLATE & SLATE SLAB COMPANY.—NOTICE OF CALL.—Notice is hereby given, that the directors have made a CALL of TEN SHILLINGS per share upon each and every share in this undertaking; and that the said call is made PAYABLE on the 23d day of April inst., and the shareholders are requested to pay the same, on or before the said 23d day of April, to the Commercial Bank of London, Lothbury.—Five per cent. will be allowed upon the calls, from the date of payment, out of the profits. Interest, at the rate of 5 per cent., will be charged up to the day of payment, upon all calls not paid upon the said 23d day of April.

E. W. MORRIS, Chairman.

Temporary Offices of the Company, 5, Walbrook, London, April 5, 1847.

ASSAYING AND ANALYSIS.—Mr. MITCHELL begs to inform the MANAGERS, &c., of MINES, SMELTING-WORKS, and MANUFACTORIES, that he still continues to CONDUCT ASSAYS and ANALYSES of all PRODUCTS, metallurgical and manufacturing, at his LABORATORY,

23, *HAWLEY-ROAD, KENTISH TOWN, LONDON*,

to which address communications are to be forwarded.—Instruction in all branches of assaying and analysis as usual.

IMPORTANT TO RAILWAY COMPANIES.

PATENT KAMPTULICON COMPANY, 18, CORNHILL.

This company having completed their new factory, are prepared to supply railway managers and contractors with an elastic material (perfectly non-absorbent) to place between the rails and sleepers, and between the frames and bodies of carriages, to prevent jarring, and, consequently, wear and tear. The elastic planking is strongly recommended to be used for the backs and sides of carriages, to prevent splinters when accidents occur.

By order of the board. P. G. GREVILLE, Secretary.

SULPHUR.—TO BE SOLD, RODGERS'S PATENT FOR THE SEPARATION OF SULPHUR FROM MINERAL SUBSTANCES.

Apply to Mr. Phillips, 2, Duke-street, Adelphi, London.

THE SETT of a SILVER-LEAD MINE, in CARDIGANSHIRE, of a very promising nature, TO BE DISPOSED OF.—For further particulars apply to Messrs. Crossman, Sommers, and Co., 28, Threadneedle-street.

TO CIVIL ENGINEERS AND CONTRACTORS.—WANTED, by the advertiser, a practical engineer, a SITUATION, to SUPERINTEND the CONSTRUCTION of WORKS generally—having been a superintender of works the last 10 years. Satisfactory testimonials can be produced.—Address "A. B." No. 1, Railway-terrace, Garford-street, West India Dock, London.

TO MINERAL ENGINEERS.—WANTED, a thoroughly experienced, practical, and responsible person, as MINING ENGINEER and MANAGER of a valuable and very extensive COAL-FIELD in SOUTH WALES, whose testimonials will bear the strictest investigation.—Application, with full particulars and testimonials, addressed "A. B." to be sent to the office of the *Mining Journal*, 26, Fleet-street, London, on or before the 20th of April next.—March 30, 1847.

TO MINE ADVENTURERS.—A respectable YOUNG MAN, who has had considerable experience in Cornwall for the last nine years, as an ASSAYER OF COPPER, SILVER, LEAD, TIN, IRON, &c., and also a general knowledge of SMELTING and PRACTICAL MINING, OFFERS his SERVICES to any GENTLEMAN, or COMPANY, concerned in the above branches. He has been abroad, and is acquainted with the Spanish language, and has no objection to go again—especially to South Australia.—Letters (post-paid), addressed to Mr. James Lane, 75, Old Broad-street; or at the office of the *Mining Journal*, 26, Fleet-street, London, will receive every attention. April 10, 1847.

WILSON & FRASER, 2, WELLINGTON-BUILDINGS, LIVERPOOL, and 13, EXCHANGE-PLACE, GLASGOW, have always ON SALE PIG-IRON, BAR-IRON, RAILWAY CHAIRS, and RAILWAY BARS.

MESSRS. J. PAINTER AND CO., SHAREBROKERS,
MINING AND GENERAL AGENTS,
25, *CASTLE-STREET, LIVERPOOL*,
AFFORD EVERY INFORMATION as to the STATE of the MARKETS, PRICES, upon application.

JAMES BLACK & CO., STOCK AND SHARE BROKERS,
PRODUCE AND COMMISSION AGENTS,
ALLIANCE LIFE AND FIRE ASSURANCE COMPANY'S OFFICE,
7, *ADELPHI-COURT, ABERDEEN*.

WILLIAM H. SMITH, MINING SHARE AGENT,
10, *WARNFORD-COURT, THROGMORTON-STREET*,
has SHARES FOR SALE in the following MINES—viz.:

WHEAL LOUISA,	ALBERT CONSOLS,
WHEAL BLENCOWE,	WEST SHEPHERD,
WHEAL MARY PENTUAN,	VICTORIA TIN MINING COMPANY.

*** Every information will be afforded on application.

MESSRS. LINTHORNE, JONES, AND CO., STOCK, MINING, AND SHARE AGENTS,

*** Every information will be afforded as to the markets and prices of the above, by application (post-paid) at their offices,
48, *THREADNEEDLE-STREET, LONDON*.

THOMAS P. THOMAS, MINE AGENT, AND DEALER IN RAILWAY AND OTHER SHARES.
18, *THREADNEEDLE-STREET, LONDON*.

MINING OFFICES, 1, *ST. MICHAEL'S-ALLEY, CORNHILL, LONDON*.

WATSON AND CUELL, MINE AGENTS.—N.B.—STATISTICAL INFORMATION furnished (on application) to SHAREHOLDERS in MINES in Cornwall, Devon, Scotland, Ireland, Wales, and Spain.

MR. R. TREDINNICK, MINING AGENT AND DEALER IN EVERY DESCRIPTION OF SHARES.
THREE KING'S COURT, LOMBARD-STREET, LONDON.

MR. I. A. JOSEPH, STOCK, SHARE, AND GENERAL MINING AGENT,
7, *BANK CHAMBERS, LONDON*.
N.B.—A few SHARES in the TOL PETHERWIN MINE FOR SALE.—PURCHASER of ALFRED CONSOLS and WHEAL MARIA (Hayle).

JONATHAN DAVEY, MINE AGENT, SURVEYOR, AND SHAREBROKER,
MATTHEW-STREET, TAVISTOCK.
Mines surveyed, inspected, and reported on, at the shortest notice; plans, sections, and dialling performed, by day or contract.

JAMES LANE, MINING SHARE DEALER,
75, *OLD BROAD-STREET, LONDON*.

MINING ADVENTURERS' SUBSCRIPTION ROOM,
28, *THREADNEEDLE-STREET, LONDON*.
CROSSMAN, SOMMERS, AND CO., AGENTS.
SHARES FOR DISPOSAL.

Birch Tor Tin Mine	West Wheal Providence Copper Mine
Wheal Yeoland Copper Mine	Grambler and St. Aubyn Copper Mine
Grose's Delabole and Wharncliffe Slate Quarry	Wheal Tremayne Copper Mine
&c. &c. &c.	

CONSOLIDATED TRETOIL MINING COMPANY.—The directors hereby give Notice, that, in conformity with the resolution of the meeting, on the 3d ult., a GENERAL MEETING of the shareholders will be HELD at these offices, on Friday, the 23d April inst., at Two o'clock p.m. precisely.

HENRY THOMAS, Secretary.

Mining Offices, 8, George-yard, Lombard-street, April 6, 1847.

NATIONAL BRAZILIAN MINING ASSOCIATION.—In order to accomplish the purpose stated in the report, read at the meeting of the 8th inst., parties holding UNMARKED SHARES are requested to SEND their NAMES and ADDRESSES, together with the NUMBERS of their SHARES, to this office, under cover to the directors, on or before Saturday, the 10th of April proximo.

26, Throgmorton-street, March 29, 1847. R. IRELAND, Secretary.

TINCROFT MINING COMPANY.—Notice is hereby given, that the ANNUAL GENERAL MEETING of the shareholders will be HELD on Friday, the 30th of April, at 44, Finsbury-square, at Two o'clock precisely.

London, April 5, 1847.

TRELEIGH CONSOLIDATED MINING COMPANY.—Notice is hereby given, that a DIVIDEND of SIX SHILLINGS per share, being 5 per cent. upon the paid-up capital, has been declared by the directors, and that the same will be PAID at the office, on Monday the 3d of May next, and on every subsequent Monday, between the hours of Eleven and Three. The certificates will be required to be left two clear days, for the purpose of being marked.

57, Old Broad-street, April, 1847. WILLIAM NICHOLSON, Secretary.

BAROSSA RANGE MINING COMPANY,
(SOUTH AUSTRALIA).

At the ANNUAL GENERAL MEETING of the proprietors of the Barossa Range Mining Company, held at the company's offices, on the 6th April, 1847, the following resolutions were agreed to:—

1. That the report of the directors and the balance-sheet be received and adopted.
2. That the directors and auditors be re-elected for the ensuing year.
3. That the directors be requested to call an Extraordinary General Meeting on the receipt of their next advices from the colony, for the purpose of deciding whether the number of shares in the company should be increased by subdivision to 12,000, or any other number.

THE PATENT SAFETY FUSE,
FOR BLASTING ROCKS IN MINES, QUARRIES, AND FOR SUBMARINE OPERATIONS.—This article affords the SAFEST, CHEAPEST, and most EXPEDITIOUS MODE of effecting this very hazardous operation. From many testimonies to its usefulness with which the manufacturers have been favoured from every part of the kingdom, they select the following letter, recently received from John Taylor, Esq., F.R.S., &c.:—"I am very glad to hear that my recommendations have been of any service to you; they have been given from a thorough conviction of the great usefulness of the Safety Fuse; and I am quite willing that you should employ my name as evidence of this."

Manufactured and sold by the Patentees, BICKFORD, SMITH, and DAVEY, Camborne, Cornwall.

GUN-COTTON.—SCHONBEIN'S SPECIFICATION—THIS DAY'S *Mechanics' Magazine*, price 3d.—Office, 166, Fleet-street.

April 10, 1847.

CRAMPTON'S IMPROVEMENTS IN LOCOMOTIVE ENGINES.

[Specification of patent granted to T. R. Crampton, engineer, of Adam-street, Adelphi, for certain improvements in locomotive engines. Patent dated August 25, 1846. Enrolled February 25, 1847.—*Patent Journal*.

This invention comprises 16 different improvements in the working or other parts of a locomotive engine, and are as follows:—According to the first part, the patentee constructs his engine with the axle of the driving wheels placed at the end of the fire-box, about midway between the top of the boiler and the under side of the fire-box; and in order that the distance between the extreme wheels should not be too great, he shortens the fire-box, in a longitudinal direction—while at the same time an increased amount of fire-box surface is obtained by extending the fire-box under the driving axle, and also under the body, or tubular part of the boiler, which portion he forms as near as possible of the same shape as the boiler, when it does not interfere with the axle of the running wheels; second, he combines the use of an extended fire-box, under the cylindrical part or body of the boiler, with engines having the axle of the driving-wheels under the boiler; the axle is placed close in the angle formed by the fire-box and boiler, the fire-box being curved under the axle, and is extended some distance beyond it: the advantages of this combination are, that instead of having the fire-box the whole length of the bars on the end of the boiler, it may be constructed much shorter, having by that means less overhanging weight, and at the same time retain an equal area of fire-box surface. The third improvement consists in placing a spring parallel to the end of the boiler for supporting it from the axle of the driving-wheels when placed in that position; the advantages of which are, that the fire-box may be of larger dimensions of a narrow gauge railway, than when the springs are at the sides, from the room occupied by them; he states that he is aware that engines have before been constructed with a spring situate as herein represented, but states that it has always been in conjunction with the axle of the running wheels. Fourth, it consists in placing a spring across the body of the boiler in engines having the axle of the driving-wheels placed under the boiler—the weight being supported by side rods, or supporters from the axle, to the ends of the springs; this disposition of the spring enables him to obtain more room for the pumps and other gearing, and also gives greater facility for repairing the same, when such is necessary. Fifth, he combines the use of outside eccentrics or return cranks for working the slide valves of locomotives, with such engines as are constructed with outside cylinders and straight driving axles placed behind the fire-box; the return cranks or eccentrics are represented in our front cut, and consist of an arm which returns from the main crank pin, the centre carrying a joint at its inner end, on which the eccentrics are placed—or, if used as cranks, they must terminate in a position suitable for imparting the required motion to the slide valve. The reversing gear, it will be seen, is the same as that now generally used, and will, therefore, require no explanation. The sixth improvement is a combination of the outside eccentrics or return cranks, already explained with locomotive engines having the straight axle of the driving-wheels placed under the body of the boiler; the advantages of which are, that the curve, or that part of the fire-box which comes near the axle, can be brought much closer together than when the eccentrics are on the driving axle when so situate. Seventh, these improvements consist in having a fire-door under the axle of the driving-wheels, when such axle is placed on the end of the fire-box (extended as before described), by which the firing is much easier conducted; this may also be used in conjunction with another door situated above the axle; the only alteration of the engines requisite, being the lowering of the foot plate below the level of the lowest fire-door. The eighth improvement consists in placing the pumps, and eccentrics for working the slide valves of locomotive engines on the outside of the framing—by which arrangement, easy access is had to the working parts, in the event of any repairs being requisite, and at the same time is always exposed to view, so that the engine-driver can more easily see whether the gear is in correct working order. Ninth, he combines the use of an oval form of boiler with engines having the axle of the driving-wheels placed behind the fire-box—by which means he is enabled to have a boiler of much larger dimensions, where confined by the narrowness of the gauge, without increasing the height of the centre of gravity by keeping the body of the same nearer the ground; he is aware that locomotive boilers have before been made slightly oval, perhaps to the extent of 3 or 4 in., such being considered the extent to which it could be carried without endangering the safety of the locomotive, by carrying the centre of gravity too high, the length of the oval being in the direction of its height; but by having the axle of the driving-wheels situated as herein mentioned, the necessity of raising the centre of gravity is obviated by lowering the whole body of the boiler, and consequently the oval may be carried to the extent of 14 or 15 in., and even more—care being taken to strengthen it in proportion by means of stays inside the boiler. Tenth, he attaches the tender to the engine at the smoke-box end, which has the effect of pushing it in front; it is constructed to contain the water only, the receptacle for coke being on the top of the boiler, over the fire-box; an apparatus is also constructed in connection with this arrangement, so that the engine-driver can apply the brakes to the wheels of the tender without leaving the foot-plate. The eleventh improvement consists in placing the axle of the driving-wheels across the end of the smoke-box, the frame-work being lengthened to receive support from the bearings; the effect of this will be, that the driving-wheels will draw the locomotive after them. Twelfth, the arrangement of engine exhibited in the engraving, is that described under this head of the invention, and the improvement consists in combining the position of the axle of the driving-wheels, with the arrangement of outside cylinders, pumps, and eccentrics; the boiler has a recess formed in its upper part to receive the driving axle, whereby a boiler of moderate dimensions can be obtained without unnecessarily increasing the diameter of the driving-wheels; a passage is placed across this recess above the axle for the free escape of the steam generated in the body of the boiler, into the steam chamber, the steam being carried from thence to the cylinder by the steam-pipe over the body of the boiler; this arrangement affords great facilities of working and enlarging the parts, and otherwise improving the locomotive now in use on narrow gauge railways. The thirteenth head relates to the combining outside cylinders, eccentrics, and pumps, with engines having the driving axle placed at the end of the extended fire-box; this arrangement admits of the fire-box shell being carried much closer to the axle, and thereby effecting a saving of room—and renders the whole more convenient and compact, from the absence of eccentrics on the central part of the driving axle. Fourteenth, this is a certain construction of fire-box, whereby he is enabled to make the cylindrical or body part of the boiler of much larger dimensions, and consequently to contain a greater number of tubes than can be employed in any other construction of locomotive boilers adapted for a gauge of 4 ft. 8½ in.; the diameter of the boiler is such as to project beyond the extreme breadth of the running-wheels; the centre, or greatest breadth of the boiler, is placed above the periphery of these wheels, with which it does not, therefore, interfere; the smoke and fire-boxes have suitable segmental projections at the upper part, where they are joined to the body, and thus a greater extent of tubular surface is obtained. Fifteenth, the coupling two locomotive engines with the fire-box ends together. The tender is placed at the smoke-box end of one of the engines so situate, each having suitable communications for obtaining the necessary supply of water; the advantages derived from this mode of coupling being, that one set of men is sufficient for the working of both engines, and thereby effecting a great saving. The receptacles for the coke are placed over their respective fire-boxes, as explained in a former part of this description. The sixteenth and last improvement is for preventing the entire back surface of the slides in locomotive engines receiving the pressure of the steam, which is productive of great and unnecessary friction; he constructs the slide with a raised ridge of metal on the back part thereof, the diameter of which is as large as can be described within the back surface of the slide; to this a thin ring or flange of sheet brass is affixed at its inner circumference, which is of a similar diameter with the projection on the back of the slide. At the extreme diameter of the brass ring, another thick ring of metal is affixed—the substance of which is just sufficient to cause it to bear upon the inside of the slide-jacket, which is faced parallel with the slide-face. It will be obvious that, on steam being admitted to the slide, its pressure on the corners uncovered by the spring packing, will be sufficient to keep it close to its work; while at the same time the steam acts on the ring of metal next the jacket, keeping it against that surface, and consequently preventing the pressure of the steam exerting any undue force on the slide-face, by excluding it from the back. The thin ring of brass admits of sufficient elasticity to allow for wear or any inequality in the rubbing surfaces. A small aperture is made in the slide-jacket for the free escape of any steam which may get between it and the spring ring.

Having described the nature and advantages derived from the adoption of his improvements, he states that which he claims as new, and of his invention, is—first, the combination of an extended fire-box, with a locomotive engine, having the axle of the driving-wheels placed at the end of the fire-box; second, an extended fire-box under the cylindrical or main body of the boiler of a locomotive engine in combination with engines having the axle of the driving-wheels under the boiler; third, the use of a spring placed parallel to the end of the boiler, supporting the boiler from the axle of the driving-wheels; fourth, the use of a spring across the upper portion of the body of the boiler in engines having the axle of the driving-wheels placed under the boiler; fifth, the use of outside eccentric or return cranks, for working the slide valves of locomotive engines in combination with engines having outside cylinders, with straight driving axles placed behind the fire-box; sixth, the use of outside eccentrics in combination with engines having the straight axle of the driving-wheels placed under the the body of the boiler; seventh, the use of a fire-door under the axle of the driving-wheels; eighth, placing the pumps and eccentrics for working the slide valves of the engines outside the framing; ninth, the oval form for the body of the boiler, in combination with engines having the driving-wheels placed behind the fire-box; tenth, attaching the smoke-box end of the engine to the tender containing the water; eleventh, placing the axle of the driving-wheels at the end of the smoke-box; twelfth, the combination of outside cylinders, eccentrics, and pumps, with an engine having the straight axle of the driving-wheels placed in a recess in the boiler; thirteenth, the combination of outside eccentrics, cylinders, and pumps, with engines having the driving axle placed at the end of the extended fire-box; fourteenth, the use of a fire-box with projections at the sides, adapted to receive a large diameter of boiler; fifteenth, coupling two locomotive engines at the fire-box end; sixteenth, the adaptation of a spring metallic ring to the back of the slides of locomotive engines, for the purpose of preventing the pressure of the steam on the principal part of its surface, as hereinbefore described and set forth.

IMPROVEMENTS IN RAILWAY PROPULSION ON STEEP GRADIENTS.—Mr. Elijah Galloway, C.E., who has obtained a patent for a method of ascending the steepest gradients with the greatest facility, exhibited some experiments with a model engine, worked by atmospheric power, on a gradient of one in six, and with a load proportionate to the weight of the ordinary engine, and three or four passenger carriages. The invention consists in adding two driving wheels, horizontal or inclined, to the present locomotive. These act on each side of a middle rail laid between the ordinary rails. These wheels are drawn towards each other by means of adjusting screws, acting on springs—so that they can be pressed together with any degree of force. The pressure, therefore, of these wheels is exerted simultaneously on each side of the middle rail, and can be increased or diminished at pleasure. By such an arrangement, a bite, or adhesion, is obtained far beyond what is due to the weight of the engine; and as the adhesion can be increased or diminished exactly according to the amount of force with which the wheels are pressed against the rail, the system professes to obviate the slipping of the wheels upon the rail, and remove that drawback on locomotive power which limits its application to railways which are comparatively level. Although the patentee feels convinced he will hereafter be able to show that his system may be advantageously applied on the level as well as on the inclines, and that high velocity is not inconsistent with the principle, he is advised to confine attention for the present to its value on inclines. For this purpose, it is intended to attach a pair of the new driving wheels to the engines, called luggage engines, where great tractive force, rather than high speed, is the object. Such engines have their wheels coupled, and the improvement will be effected by affixing the nipping wheels in such a manner by a peculiar connection (which cannot be explained without drawings), so as to act in combination with the other wheels. On good gradients, therefore, there would be no middle rail; but in localities where slipping arises, a middle rail will be laid, and an additional bite to any amount will thus be obtained by the pressure exerted on the middle rail. An experiment has been permitted to be made by the directors of the Great Western Railway Company, at the Maidenhead station. This was done by altering an old engine belonging to that company, and laying a short length of line on a gradient of 1 in 19. The results appear to have been satisfactory—the increase of tractive power having been as 4187 lbs. to 1600 lbs.; and the inventor thinks he is justified in stating, that the present luggage engines would draw without slipping, even if the rails were greasy, on a gradient of 1 in 20, 80 tons; 1 in 40, 160 tons; 1 in 60, 240 tons; 1 in 80, 320 tons; and 1 in 100, 400 tons. As the bite, or adhesion, is totally independent of gravity, it can be increased or diminished at pleasure to any extent, even when the train is in motion—in fact, there is no limit to the

power of ascending; and the steepest gradients can be descended in perfect safety, by a break being applied to the middle rail, independent of the wheels. The introduction of such a system, as the one under notice, will, probably, have a great effect on the cost of construction of lines on the locomotive principle, particularly when good gradients can only be obtained by great expense in cuttings, embankments, &c.; and, as the labour alone has caused the cost of railways to vary from 9000*l.* to 40,000*l.* per mile, the successful application of such invention becomes of considerable importance.

AMERICAN LOCOMOTIVES.—Messrs. Hinckley and Drury, of Boston, commenced, about six years since, building locomotive engines, at which time the six-wheeled engine, with *outside connections* (weighing about 10 tons), was considered sufficient for the passenger business upon the New England roads. In consequence of the regular increase of business on these roads, from that time to this, they have been called upon for engines of an increased capacity, equal to the calls of business; and now have orders for passenger engines, weighing 22 tons, called the "eight-wheeled engine"—*inside* connections, crank axle, with four driving wheels, and a truck, which are coming into general use in that part of the country. There were strong objections to the crank axles, when they were first brought into use, from the frequent failure of the cranks; but since making some improvements, such as adding another set of drivers, and heavier crank axles, they are now considered by the managers of our northern roads, the best kind of machine in use for the passenger business, as they can be run at a high speed, without the great lateral motion of those of the outside connection, and, consequently, with less injury to the track. The driving-wheels used by Messrs Hinckley and Drury, are nothing less than 5 ft. in diameter for passenger engines, and they have gone as high as 6 ft. We learn that this house has now orders for six months to come, for at least one machine a week, and for none of less weight than 16 tons. The manufacturers do not pretend that their machines are superior to those manufactured elsewhere; but being in the neighbourhood where these machines are used, the various superintendents are enabled to call and dictate how they choose to have their work done; and, we are happy to know, that perfect satisfaction has thus far been given, where their locomotives have had a trial.—*American Railroad Journal.*

SUBMARINE ELECTRIC TELEGRAPH.—An experiment, completely successful, was witnessed on Saturday last, in the Isle of Wight, of the powers of Mr. Nott's electric telegraph. A perfect and rapid communication was established between East and West Cowes by means of a single wire sunk across the channel. The telegraphs were attached, one being placed at the Medina Hotel, and the other at the opposite side of the channel, near the Fountain Hotel. The signal bells were then rung simultaneously, and the telegraphs commenced working and communicating questions and answers with the greatest precision and certainty, with a galvanic battery of low power, showing that a single isolated wire immersed in the water could carry the electric current a distance of half a mile. The water brought back the current to its source, without the slightest perceptible dispersion or loss of the dynamic power. This experiment demonstrates the perfect practicability of submarine communication, and the question as to its application may be said to be satisfactorily solved. The consequences can scarcely be as yet appreciated, though they are wonderful to contemplate. Instantaneous communication may be established between places divided by estuaries and channels, and islands and continents brought into immediate proximity of correspondence.

BRETT'S ELECTRIC PRINTING TELEGRAPH.—We had much pleasure in witnessing the operation of this highly useful and important invention, on Saturday last, at the offices in Parliament-street. Hitherto the electric telegraph has been confined to the conveyance of *verbal* messages, which are read by peculiar signs on an indicating dial; and on that account its utility must, to a great extent, be limited. Mr. Brett, however, introduced to us, on Saturday last, an apparatus by which any two parties may themselves carry on a negotiation, or correspondence, and which will be unerringly printed at the rate of 87 letters per minute, without limit of distance, either by sea or land. At one extremity of a line of telegraph is fixed a small box, containing a row of keys (similar to those of a pianoforte), and marked with the letters of the alphabet, which is connected by *a single wire* to a printing machine at the other extremity, containing a wheel, having on its circumference corresponding letters: a slight electric power is sufficient to regulate the motion of the whole, and the instant that a key representing any particular letter is touched at one end of the line, the corresponding letter of the type wheel prints—and the alarum bell rings—at the other. The communications are printed on a scroll of paper of unlimited length, from which any portion of the correspondence may be cut off at pleasure. The oceanic line (of which Mr. J. Brett is the originator) is equally simple and practicable—so that a communication made in London could be instantly printed in Dublin, Paris, Berlin, &c. Licenses have been already granted by the patentees to the enterprising house of Messrs. Livingston, Wells, and Co., of New York, for the formation of lines of telegraphic communication in North America, to the extent of upwards of 4000 miles. These lines are in rapid progress towards completion, and partly in actual operation, realizing the most sanguine expectations of the patentees and the public. It is expected that, in December next, they will be complete from Halifax, through Lower and Upper Canada, and across Niagara, will reach New York, and extend to Washington and New Orleans—so that the moment a vessel from Europe arrives at either point, the news it conveys can be printed simultaneously throughout that vast continent, at the rate of 87 letters per minute, without limit of distance. A line has been completed across the Alleghany Mountains, and it has worked admirably between Philadelphia and Pittsburg—a distance of 300 miles. The journals of Pittsburg have published the proceedings of Congress of one afternoon on the following morning; and this is the case with all the news from the great cities of the Atlantic coast. The message of the Governor to the Legislature of New York, delivered at Albany on the 7th Jan., and consisting of two columns and a half of solid nonpareil, was published in the city of New York two hours after its delivery, having been transmitted sentence by sentence by the electric telegraph. Mr. Brett had the honour of a visit from his Royal Highness the Conde de Montemolin, who appeared to take great interest in the invention, and expressed himself much pleased with it, and printed his own name by means of the telegraph. We have little doubt that it will supersede our present system, from its many superior advantages; and the Government, in particular, ought not to lose sight of so important a power. The following may be stated as a few of the advantages of this patent:—1. The immediate communication of Government orders and despatches to all parts of the empire, and the instant return of answers to the same, from the seats of local Government, &c., all delivered in an unerring and printed form.—2. A general telegraphic post-office system, uniting the chief and branch offices in London, in connection with all the offices throughout the kingdom; for transmitting messages of business, &c., from merchants, brokers, tradesmen, and private persons, at a fixed rate of charge; these communications would be printed on paper, and all enclosed in sealed envelopes, and addressed by confidential clerks, and issued by special messengers or the usual post-office delivery.—3. The advantages of this plan, applied to police arrangements throughout the United Kingdom, and to the army and navy departments, must be at once obvious to the Government. By it, instructions might be conveyed instantaneously, and the movements of the forces so regulated that any available number of them may be brought together at any given point, in the shortest possible time necessary for their conveyance. These are some of the advantages, others readily suggest themselves—namely, general communication between stations on the coast, such as lighthouses, channels, islands, &c.—so that a general supervision of the coast might be obtained for the use of the navy, Lloyd's, and for the prevention of smuggling, &c. This invention, which, as our readers are aware, is of American origin, is held unitedly by Mr. Brett and Mr. R. E. Rouse, an American.

RAILWAY IN AUSTRALIA—NOVEL PROPELLING POWER.—The wooden railway at Port Arthur is thus described in the *Geelong Advertiser*:—"This railway, or rather tramway, is formed from the hard wood of the country, and passes over a space of five miles, thereby affording a rapid and easy means of transit between the heads of Norfolk and the Long Bays, the latter of which leads directly to Port Arthur. This tramway, the projection of Capt. Booth, has proved to be a work of the utmost utility; shortening the distance betwixt Hobart Town and Port Arthur, and ensuring a rapid and certain communication at times when the long sea-passage might be impracticable. Like many men of superior intellect, it was the fortune of Capt. Booth to encounter the sneer of the common herd, who, in their narrowmindedness, predicted nought but failure to his enterprise. Nothing daunted, and possessing the confidence of the Governor, Capt. Booth toiled on till they that came to jeer went back to admire. No horse, no ox, no fixed or locomotive engine traverses its course, or assists in the work of conveyance; the waggons are *propelled by felons*—three men being generally allotted to do the work of each waggon, which is capable of conveying half a ton of goods at each transit. Upon emergency, the same gang have made their three journeys and back, 30 miles a day, conveying thus half a ton per man either way.

ETHER SUPERSEDED.—The German newspapers state that Professor Schönbein, the inventor of the gun-cotton, has discovered a new composition, which produces the same effects as the inhalation of ether, without causing any danger. The nature of the new invention is not described.

Mining Correspondence.

ENGLISH MINES.

BARRISTOWN.—We have no change in the 28 fm. level. In the 18 fm. level end, west of flat-rod shaft, the lode is worth about 16*l.* per fm.; the south part of this lode, working on tribute, is rather improved. The 12 fm. level end is worth about 12*l.* per fm. We have holed a winze from the 12 to the 18 fm. level cross-cut on the middle lode; the lode on each side of the winze is worth from 10*l.* to 16*l.* per fm.; it is now working on tribute. In a rise in the back of the 18 fm. level, about 5 fms. behind west end, we have a good lode, worth about 18*l.* per fm. The following is a list of our prices for April month:—Flat-rod shaft sinking, 9*l.* per fm. (6 men); 28 fm. level end west, 4*l.* per fm. (4 men); 18 fm. level end west, 5*l.* 10s. per fm. (6 men); 12 fm. level end west, 5*l.* 10s. per fm. (6 men); drawing water off the bottom of 18 fm. level from a rise in back of 28 fm. level, 1*l.* 15s. per fm. (2 men); rise in 18 fm. level behind west end, 5*l.* per fm. (4 men); winze on middle lode, under 18 fm. level south cross-cut, 4*l.* per fm. (4 men); adit end east, 2*l.* 5s. per fm. (6 men); rise in back of 18 fm. level east flat-rod shaft, 3*l.* 10s. per fm. (2 men). Tributers about 40 men, prices from 4*l.* 15s. to 6*l.* per ton. We have engaged a vessel to take 50 tons of silver-lead ore to the ticketing at Holywell, which I hope to ship in the ensuing week. We have two or three bargains on tut-work and tribute, which will be set during next week.—T. ANGOVE: April 1.

BEDFORD UNITED.—At Wheal Marquis, in the 80 fm. level east, we are driving further north, in pursuit of the main lode. The lode alluded to in my last report, is not the main lode, but a branch or deposit of ore thrown south from the lode on the cross-course. There is, however, a good bunch of ore in the bottom of the end; and, from its very kindly appearance and richness, we are warranted in believing that the lode, when cut, will be found very rich and productive. The stopes in the back of this level are stopped, and the men put to cut ground for sinking a sump winze. The lode in the 70 fm. level east is 2 ft. wide, producing saving work; there is no alteration in the 58 fm. level east. At Liscombe, the lode in the adit level east is 2 ft. wide; and in the rise in this level the lode is 2½ ft. wide, composed of spar, mundic and ore—a strong promising lode. The sumpmen in the south engine-shaft are now engaged doing necessary work, previous to commencing sinking. The lode in the adit level east, is 2½ ft. wide, composed of spar, mundic, and gossan.—JAMES PHILLIPS: April 6.

CALLINGTON.—At the north mine, in the 100 fm. level driving south, the lode is 20 in. wide, intermixed with branches of clay-slate, and worth 10*l.* per fm.—the ground is soft; in the north end the lode is worth 10*l.* per fm.—going down the back of the level is poor; in the 90 south we are opening ground that will work at a moderate tribute; in the 40 north the lode is poor; the eastern end on Kelly Bray lode, at this level, is now in a large sparry cross-course; since we first met with the soft one, we have driven from 3 to 4 fms. In the 125 fm. level, both north and south of Johnson's engine-shaft, we are opening good tribute; in the 112 fm. level south the lode has not been taken down; the north end is suspended for the want of better ventilation; in the 100, both north and south, we are opening tribute ground; in the 90 no lode has been taken down; in the 80 north the lode is mostly composed of mundic—very kindly. We have this day sampled 102 tons of silver-lead ores, forwarded samples to the different smelters, and fixed the 14th inst. for the day of sale.—J. T. PHILLIPS: April 5.

CUBERT SILVER-LEAD.—In the 35 fm. level cross-cut we have just intersected the middle lode; but, having yet opened but little on it, cannot say much, although, as far as can be seen, it appears very promising indeed; the size is 18 in., producing some very rich work for silver-lead ore. In the 25 fm. level, going west, the lode is 2 ft. wide, carrying a leader of lead from 4 to 6 in. wide; driving east, in this level, the lode is 18 in. wide, producing good work throughout. In the 15 fm. level east the lode is also 18 in. wide, yielding some good work. Henry's shaft is not yet holed to the 25 fm. level; the lode there is 2 ft. wide, and orey. Nothing new this week to notice with respect to the tribute department.—RICHARD ROWE: April 2.

DARTMOOR CONSOLS.—I shall first direct your attention to the fact, that the tin raised in this sett is of a superior quality to that of any other mine in Devon, except Bachelor's Hall, being best-grain tin, the market value of which is full 15*l.* per ton more than that of common tin. The sett is very extensive, and includes a great number of lodes, almost all of which are found to be productive of tin, and from the main lode in particular great returns were made at very shallow depths, although the method of working was very defective, in comparison with the modern system. In regard to the present state of the mine, the extent of the operations can be best shown by a diagram, yet I shall endeavour to describe the principal workings in a few words, having been conversant with them for upwards of 30 years. The ancients wrought the several lodes as deep as their limited means would allow them. The more modern or last adventurers commenced on the main lode, and, after having cleared the water by better machinery, raised rich parcels of ore from it; they next expended a large sum in making an adit or drain from the valley, by which they succeeded in unwatering the mine, and again sunk the shafts; they afterwards excavated a still deeper adit at a much greater expense; and, though the sinking of the shafts was continued, yet the mine was effectually drained by it—indeed, few mines have such important advantages in this respect. The main lode has been worked on for a great length, and a good course of tin is laid open for some fms., both east and west of the cross-course; on this lode there are also many stopes and levels containing good work, and the facilities for working the other lodes from this one, on which the levels are so much deeper, are very great. I could say much in reference to the geological character of the district, &c., of the many natural advantages this sett possesses, if necessary, in addition to which there is a great number of the requisite buildings, and a large quantity of the machinery and materials needful for recommencing operations immediately. I have no doubt the spirited proprietors will have a handsome return for their outlay, provided tin remains at its present price, and the works are managed in an economical and judicious manner, it being, from various circumstances, much less a speculation than most other mining concerns.—JOHN PAULL, Mining Engineer: *Tavistock, April* 7.

DEAN PRIOR AND BUCKFASTLEIGH.—There is no alteration in the 30 and 40 fm. levels since my last. In the rise, in the back of the 50 east, just behind the present end, the lode is very much improved—how large I cannot state, as we have not the north wall; but the leader is about 12 in. big, good saving work, ores of rich quality; and, from the present indication, I do anticipate the most favourable results, having a good "shoot" of ore gone down in the level above—so that we may expect to raise a quantity of ore between these two levels, by rising, stoping the backs, &c., although at the present we are obliged to take all the men in the mine, as well as others, to deepen and widen the leat in Mr. Weatherdon's land—Mr. Weatherdon being about to till the fields, with corn, &c., which, if not guarded against the floods, very heavy damage must be the result—therefore, we shall lose no time in order to complete the work, so that we may again commence the underground operations.—H. CHOAKE: April 7.

DEVON AND COURTENAY CONSOLS.—I beg to inform you, that the 30 fm. cross-cut at engine-shaft is in 10 ft. We have cut the branch that the shaft went through, and which I reported on the 12th Jan.; and I am glad to say, that the branch is larger now than it was in the shaft, and producing good stones of ore; the ground is favourable for driving. It is my opinion, that we shall have a good lode when it is cut, which I expect to do in about three weeks. The lode in deep adit (on south lode) has not been taken down for the week. There is no alteration in the appearance in the adit on north lode since my last. The lode in flat-rod shaft (on north lode) is looking as well as last reported; the branch in the western end of shaft is 15 in. wide, and the other part of the lode looking very promising, being about 4 ft. wide.—J. JOB.

DRAKE WALLS.—In the bottom stopes, east of engine-shaft (by 9 men), price 65s. per cubic fm., the branches are large and improving; in the top stopes, east of engine-shaft (by 6 men), price 65s. per cubic fm., good branches of tin. In end, east of engine-shaft (by 2 men), under the 40 arch, price 180s. per cubic fm., good branches. In the 50 fm. level, west of machine-shaft (by 6 men), price 190s. per cubic fm., branches large and tinny; in the stopes east, in back of 50, at machine-shaft (by 6 men), price 70s. per cubic fm. good work; in the stopes west, in back of 50, at machine-shaft (by 6 men), price 60s. per cubic fm., good work. In the stopes, east of machine-shaft, in bottom of 33 fm. level, under the arch (by 9 men), price 55s. per cubic fm., not rich, disordered at present by a cross-course. In the stopes, at footway shaft (by 2 men), price 37s. 6d. per cubic fm., saving work. We have all the tin now ready, promised in last report, and it is going through Oxland's new process, which will take about a fortnight to complete; the gross tonnage is about 19 tons—and, if Mr. Oxland is right in his data, the next will be 16 tons. The castings for the new crusher are on the mine, and no time shall be lost in fixing them.—RICHARD WILLIAMS: April 5.

EAST CROWNDALE.—I beg to inform you, that our engine-shaft is down 33 fms. 2 ft.; the ground is composed of blue killas of a close texture, and good spots of copper ore are seen at times, disseminated through the stone. The ground in the adit level, towards the Rix Hill lodes, continues just the same as when last reported upon. I expect we shall clear up the old men's workings on the back of the north lode in a few days; I hope to send you the size and appearance in my next. We have not as yet resumed operations on the lead lode stopped on account of water, but expect to do so about the middle of next week. Our engine and pit work all in good order.—S. PAULL: April 3.

EAST TAMAR CONSOLS.—At Whitson, the men in Hitchen's shaft are getting on as expeditiously as possible in sinking under the 60 fm. level; the lode in the 60 fm. level north is 20 in. wide, saving work; in the 60 fm. level south the lode is 10 in. wide, work of a good quality. In the 54 fm. level north the lode is 18 in. wide, fluor-spar and silver-lead ore; in the 54 fm. level south the lode is still in disordered ground. At Furzehill, the shaftmen have been engaged this past week in cutting ground, and putting in bearers, cistern, &c., to fix our lift under the 46 fm. level, as we shall be enabled to take up the water at the 46, and sink with a small lift, which will be more convenient for sinking with than the large one; the lode in the 46 fm. level, north and south, is 18 in. wide, saving work. The lode in the 38 north is 20 in. wide, fluor-spar and ore; the lode in the 38 south is 10 in. wide, good work.—B. ROBINS.

GREAT MICHELL CONSOLS.—The engine-shaft is down below the 22 fm. level 10 fms. 2 ft. 6 in.; the lode therein is composed of fluor, mundic, spar, and stones of ore—very promising.—F. RICHARDS: April 6.

GUNNIS LAKE.—At Chilsworthy, I beg to inform you, that the lode in Bailey's engine-shaft is 2½ ft. wide—gossan, capel, and good stones of copper ore. In the 12 fm. level west, the lode is 2 ft. wide, composed of capel, gossan, and spar. We are still driving south in the 12 fm. level east.—W. RICHARDS.

HANSON.—We still continue to drive the 32 fm. level, east of engine-shaft, on Stainsby's lode; the lode is 18 in. wide, composed chiefly of mundic and spar, with some spots of ore; this end is now as far east as the centre of the bunch of ore we had in the level above. We also continue to work the back of the 22 fm. level, east of engine-shaft, on Stainsby's lode, on tribute, by two pares of men, at 8s. 6d. in 20s., and the adventurers dress the ore, which is equal to 12s. in the pound.—Z. WILLIAMS: March 29.

HAWKMOOR.—I beg to inform you, that the lode in the 15 fm. level, east of Hitchins's shaft, is about 2 ft. wide, composed of capel, spar, mundic, and stones of ore.—P. RICHARDS: April 6.

HOLMBUSH.—The diagonal shaft is sunk 3 fms. 5 ft. 4 in. below the 120 fm. level, and the ground is favourable for sinking. The lode in the 120 fm. level, west of great cross-course, is 9 in. wide, producing stones of ore; the lode in the 120 fm. level, east of Hitchins's shaft, on the north part, is split up in branches, and producing stones of ore. The lode in the 110 fm. level, east of Hitchins's shaft, on the south part, is 9 in. wide, composed of mundic, spar, and rich copper ore; the 110 fm. level south, on lead lode, is 2½ ft. wide, and worth 10*l.* per fm. The lode in the rise, above the 100 fm. level, is 3 ft. wide, leaving tribute ground. The lode in the 100 fm. level south is 3 ft. wide, and worth 8*l.* per fm. The lode in the 90 fm. level south is 2 ft. wide, composed of prian, flookan spar, and spots of lead. The tribute pitches are looking just the same as last reported on, and the tributers getting fair wages.—W. LEAN: April 7.

ILAM.—The lode in the 67 fm. level, west of Robina's shaft, is looking very kindly, with good spots of copper in places; the end going east is likewise carrying copper in the lode. We have intersected another branch in the end north of Robins's lode, about 4 in. big, which I consider will form a junction with the lode we are now driving on, in about 3 or 4 ft. further driving. The water in Brown's shaft has sunk little if any thing this week, as we have had a great deal of rain and snow, which has caused the influx of water in the mine.—JAMES SPRAGUE: April 6.

KIRKCUDBRIGHTSHIRE.—Stewart's shaft is 7 fms. under the 30 fm. level; the lode is very wide, promising, but poor. The lode in the end driving west, in the 30 fm. level, is large and rich, producing 2 tons of lead per fm. We have commenced the shaft west of the above shaft 50 fms. (called Keith's shaft); the lode in the end driving east at the 30 fm. level, is 4 ft. wide, but poor; the same will apply to the 20 fm. level east, but not without lead. The adit end has been pushing through a succession of slides, and, therefore, the lode is reduced in character. The stopes in roof of the 30 fm. level are doing well. We have this day shipped 30 tons 4 cwts. of lead into the *Mary* for the market, being the amount of raising for the past month; and, from present prospects, I trust the next month's raising will be a little better. We propose to open another shaft, east of the eastern shaft, in the low ground, in the coming week.—JOSEPH BUZZO: April 3.

LANIVET CONSOLS.—The leader part of the lode, in the 80 fm. level east, which is on the south part of the lode, is 1 ft. wide, producing some good grey and black ore; in the 80 fm. level west we are driving on the north part of the lode—the leader part of which is 2 ft. wide, composed of flookan, spar, and some good stones of yellow ore. In the 30 fm. level east the lode remains much as last reported. We expect the diagonal shaft will be completed to the 70 fm. level by the end of next week.—H. WILLIAMS: April 3.

LEWIS.—The lode in the 60 fm. level end east is 2½ ft. wide, worth 10*l.* per fm. for tin—very much improved since the last report. The lode in the 60 west is 3 ft. wide—unproductive at present; the lode in the 50 east is 2 ft. wide, worth 5*l.* per fm. for tin, with good indications of a great improvement; the lode in the 50 east, on south branch, is 6 in. wide, worth 4*l.* per fm. for tin; the back of this level is now being worked at one-third tribute; the lode in the 40 fm. level end east is 2 ft. wide, worth 6*l.* per fm. for tin; the lode in the 30 east is 2 ft. wide, set at 10s. per fm. and 9s. in 20s. for saving the tin. I find that the average tribute for the whole of our pitches, which are 23, is 7s. 3d. The prospects since my last report have been daily improving.—S. S. NOELL.

LLWYN MALEES MINE.—In my former report of last week, I stated the 8 fm. level east yielded 2 tons of ore per fm.; since then, having met with a dead piece of ground, the quantity per fathom is decreased to one ton; the 8 fm. level west, I am glad to say, continues good; it is very satisfactory to find the length of the ore ground increasing; and we may now say, that the 8 fm. level is 22 fms. west of the engine-shaft, and 17 fms. east—making a total length of 39 fms.; the stopes, in the back of the 8 fm. level west, have improved, and I expect will now continue to do so, as we are fast approaching the best ore in the 8 fm. level west. In the 14 fm. west, I am decided we are on another part of the vein, and not in the bearing or orey parts; and it is now our determination to drive a fathom or two on a branch of one more south than the level, and which I believe will lead us to the main course of ore. I beg here to observe, that I have materially found the want of a dial, which, in all probability, would have determined, ere this, the main lode, or main part of it. I am not at all discouraged that we have not a good lode on the bottom level, as I feel quite confident, from the appearance of the lode in the 8 fm. level, east and west of the engine-shaft, as well as the good lode in the winze, which is 6 fms. 3 ft. under the 8 fathom level, that we have a good course of ore very close to us, at the east shaft, at the depth of the 14 fm. level. I am glad you have determined to advance the labourers' wages; and, by this means, we shall finish the embankment of the pond very soon. The girls and boys on the ore floors must have the advance also, as we are now, in consequence of the low wages, short of hands at this place. We have 30 tons of clean ore and upwards, on the floors; and I have every confidence that we shall have a good week's work done on the floor.—H. FRANCIS: April 3.

MENDIP HILLS.—*March* 29.—I have nothing particular to inform you this week. Our operations in the slag department have been very favourable indeed. The lode in the 38 fm. level, driving south of Stainsby's shaft, is now 6 ft. wide, composed of flookan, spar, and particles of lead; I find the lode mentioned in my last report has been stoped away about 11 ft. deep, at which point it is 3 ft. wide, composed principally of white spar, the appearance of which does not present anything encouraging; I have, therefore, suspended all further operations on it.——*April* 5.—Since my last report, our progress in the slag department has been most satisfactory; the whole length of trench, or "open cutting," is 110 fms., and deepest part, when the stope in course of opening is completed, will be 22 ft.; at this point, I before remarked, we shall take the hill; we are also removing the top rubbish from a very large bed of slags now opened on 10 ft., and, should it continue to the bottom, which I have not the least doubt will be the case, will make it from 14 to 15 ft. thick, which can be advantageously taken away when the tramroad, &c., is completed. The lode in the 38 fm. level, driving south of Stainsby's shaft, continues about 6 ft. wide, principally composed of quartz and flookan, with sprigs of lead at times, ground favourable for driving.—F. C. HARPUR.

NEW EAST CROWNDALE.—We have met with a cross-course in the 14 fm. level, which has heaved the lode. From stones taken out of branches cut in driving north, there is every reason to believe we are close approaching the main lode, as they are of the same character as stones taken from the lode before intersecting the cross-course.—JAMES CARPENTER: March 25.

PENTUAN WHEAL MARY.—As I anticipated, in my last letter to you, the lode has been cut in the adit; the miners have got into it about 18 in. or 2 ft.; but the north wall has not yet been discovered, consequently the size of it is not ascertained; but as far as we have yet gone, it presents some tolerable gossan and quartz, the latter containing spots of mundic, jack, and copper ore; the men will henceforth be employed in driving on the course of it; and as the ground is not expensive, and the locality offering such advantages, I think that this lode may be proved at a very trifling expense. I would recommend a larger force being employed—say, two additional men—with which, according to the present appearances of the ground, the adit would advance rapidly, and, from the great acclivity of the hill, immense backs will be obtained; and, of course, if the lode prove productive, returns may be made early and cheap.—J. HITCHINS: April 5.

PENNANT.—At Pennant Waterfalls, a large and prominent seam of ore runs in the south-west direction, through the high mountain called Pennant, or Head of the Vale, parallel, and in juxta-position, with a seam of mountain limestone, which, when taken together, are about 8 ft. wide. These parallel seams again appear in the south-west side of Pennant, in the Pumrhyd Vale, and are from 12 to 16 ft wide. In the north-east crop (Pennant Waterfalls), as far as the seam has been opened, which is about 2 yds., the contents are an extremely coarse silicated per-sulphuretted iron ore, intimately mixed with manganese, zinc, mica, silver, gold, and copper. An open cut is being made about 40 yds. from the water-course, and parallel with it, which will cut the seam in about 10 fms., and which will prove the value of the ore at this crop, and which also is at a convenient depth for working the lode in the south-west direction. The ore, as cut at the crop, will be valuable for the production of a compound sulphate of iron (the copperas of commerce), which will give an opportunity for separating the oxides of gold, silver, and copper; and by this means producing a richer ore of ferruginous oxides of the more valuable metals suitable for the smelter or refiner. At a greater elevation, osterops the umber stone, which, by exposure to the atmosphere, undergoes decomposition; the decomposed stone, most easily, may be made marketable on the spot, at a very

trifling expense. The large outcrop in the Pumrhyd Vale, by washing, will give a most richly-coloured ochre: the more richly-coloured parts will fetch in the market 1s. per lb. Of these ochres many tons are now on the crop, and require selecting and washing for the market. For effecting this purpose, pits are being made near the Waterfall. The numerous veins which will be cut by driving into the parallel lodes, may be taken seriatim as they are cut. A string cut in the great adit gives spots of sulphuretted copper; and when the vein is reached to which it belongs, it may prove to be copper. Generally, they contain galena, or sulphuretted lead. About 14 years since I surveyed part of the estate of Mowddwy. At that time the existence of minerals was doubted, but I differed in opinion, and reported to the contrary, especially with reference to Cowarch and Craig Wen; and, on the present occasion, am happy in being borne out in my views, by finding that Craig Wen can send to market about 2000 tons of galena annually, and that Cowarch, for some time, has been sending galena to market, and is assuming the appearance of a regular mine. Your prospects at Pennant are equally good.—W. Parry: *Birmingham*, March 31.

SILVER VALLEY.—*March* 29.—In the 20 fm. level west the main part of the lode is 6 in. wide, and is intermixed with spots of rich silver-lead and grey silver ore; the other parts, or branches, contain a small proportion of silver, but is not at present worth saving; in rising from this level, and in sinking towards this place from the 10 fm. level, we are progressing satisfactorily; the lode at both these places has a very favourable appearance, composed of flookan, carbonate of iron, and spots of lead. There is no important alteration in any other part of the mine. We are in course of dressing another parcel of silver, and shall get all we have now broken prepared for market as soon as possible. ——*April* 5.—The engine-shaft is sunk 8 fms. 1 ft. below the 40 fm. level, and the ground is very favourable. At the silver mine, we shall now commence driving the 30 fm. level west, and hope to find here a continuation of the silver ground that we now have at the 20 fm. level west; in this level the lode from the back of the end downward is divided into two parts—the north branch is unproductive, but the south, or main part, is about 5 in. wide, containing a little good work for grey silver; in the rise, in the back of this level, and in the winze, sinking below the 10, the lode has a favourable appearance, composed of flookan, carbonate of iron, and spots of silver-lead ore; in the 10 fm. level east we have got into more settled ground since last report; and the north part of the lode, although small, is kindly, composed of carbonate of iron, a little flookan, and occasionally spots of lead. At Callington Commons, the lode in the adit level west is composed of flookan, quartz, carbonate of iron, and a little mundic. At Wheal Brothers, in the deep adit, we are in so far as the western whim-shaft, and have commenced clearing west from this place.—S. Richards.

SOUTH DOLCOATH.—The sumpmen have completed the plat, and will be in course of sinking below the 30 fm. level in a day or two. The lode in the 20 east is 4 ft. wide, composed chiefly of gossan, with some mundic, and spots of copper ore; the lode in the 20 west is 3 ft. wide, composed of mundic, iron, soft spar, and spots of copper ore, very kindly.—W. Paull: March 29.

SOUTH TAMAR UNITED.—We have cleared and secured, from Monday's shaft, 10 fms. north in the adit level; the engineers are getting on as satisfactorily as possible, and everything is in a progressing state.—B. Robins.

TAMAR SILVER-LEAD.—In the 160 fm. level, south of the shaft, the lode is 1 ft. wide, saving work; in the same level north, the lode is 18 in. wide, composed of capel, interspersed with ore. In the 145 fm. level south, the lode is 6 in. wide, unproductive; in the winze, sinking below this level, the lode is 20 in. wide, producing work of a coarse quality; in the 145 end, north of the shaft, the lode is 2 ft. wide, producing work of a promising appearance. In the 135 fm. level, south of the shaft, the lode is 2½ ft. wide, composed of capel, with a small quantity of ore. In the 125 fm. level, the lode is again making its appearance, after passing through about 3 fms. of slidy ground. In the rise, in the back of the 35 fm. level, the lode is 2 ft. wide, yielding work of an average quality. At North Tamar, in the 70 fm. level, the lode is still small and unproductive. In the 60 fm. level, north of the shaft, the lode is 2 ft. wide, 1 ft. of which is good work; at the south end, in this level, the lode is 18 in. wide, producing work of a very promising character. We hope to sample, on Thursday, 1st April, about 90 tons of rich silver-lead ore.—J. Spreague: March 29.

TIN VALE CONSOLS.—The adit level is driven south 64 fms., and intersected the north tin lode in the east and west ends; it is 2 ft. wide, producing good tin, the remainder part of the lode (exclusive of the tin) is quartz, mica, and black capels, which composition is the forerunner of abundance of tin; the said ends will now pay for working—I mean, pay its own cost; the ground by the side of the lode is soft granite, and can be driven or worked for the low price of 50s. to 60s. per fm., and very little good tin will pay the expenses, but in the said lode there is a great portion of good tin. From the north lode the adit level is continued on south 8 fms., and cut the middle tin lode, which is 3 ft. 6 in. wide, and, in a word, exactly the same properties as the north lode. From the middle lode, 18 fms. further south, there is the great south tin lode; a shaft is sunk down about 10 fathoms, which has cut the lode in the shaft, 6 feet wide, producing very large quantities of tinstuff; the said tinstuff that was taken up from the lode in the shaft is now to be seen on the surface; we have to sink on the course of this lode 34 fms., to have a communication with the adit level—that will make the mine between 40 and 50 fms. deep at the adit level—so you can see what high tin ground there will be to work on; and it is my opinion, we shall make large returns of good tin from the great south tin lode above the adit level, exclusive of the north and middle tin lode.—John Floyd: April 5.

TRELEIGH.—At Christoe's, in the 110 cross-cut, the ground is much as usual, and we expect to cut the lode, east of the cross-course, this month; in the 110, east of ditto, the lode is 2 ft. wide, without mineral, and rather disordered. In Garden's shaft, below the 90, the ground continues very hard, and in elvans; in the 90, west of ditto, the lode is about 2 ft. wide, worth 20*l.* per fm. In the 80, west of ditto, the lode is about 2 ft. wide, producing occasionally stones of ore; in the 80, east of ditto, the lode is 4 ft. wide, in branches, with killas intermixed, worth 25*l.* per fm. In the rise, above the 70 west, the lode is 18 in. wide, no mineral; in the 70, west of Goodfortune, the lode is 3 ft. wide, worth 16*l.* per fm. In Symons's shaft, below the 60, the lode is 3 ft. wide—will produce one ton of ore per fathom, worth 5*l.* per ton. Garden's shaft is 7 fms. 5 ft. below the 90 fm. level.—W. Symons: April 3.

UNITED HILLS.—The water is still in the 90 fm. level. In the 80 fm. level, east of Williams's shaft, the lode is 3 ft. wide, worth 25*l* per fm.; west of cross-cut, lode 18 in. wide, worth 14*l.* per fm. In the 70 fm. level, eastern end, the lode is 2½ ft. wide, worth 8*l.* per fm.; in the eastern shaft the lode is 3½ ft. wide, worth 20*l.* per fm. We are not driving in the 60 fm. level; the lode in the shallow adit is large and poor. At Wheal Charles, in the 50 fm. level the lode is 2½ ft. wide, producing but a small quantity of ore. In the 40 fm. level, eastern end, the lode is 2 ft. wide, not looking quite so well as when last reported; in the winze the lode is 4 ft. wide, worth 14*l.* per fm. The lode in the stopes is 2½ ft. wide, worth 18*l.* per fm. At Wheal Sparrow, in the 40 fm. level the lode is 18 in. wide, worth 5*l.* per fm. In the 30 fm. level the lode is 7 ft. wide, worth 25*l.* per fm. In the 20 fm. level we are not driving. In the adit level the lode is 1 ft. wide, not producing any ore.—Thomas Trevenen; Robert Williams: April 6.

VICTORIA TIN.—Since writing you last, we have cut the main lode to the east of our engine-shaft, and have found it to be very productive for tin, the lode being 4 ft. wide, yielding large rocks of excellent tinstuff, specimens of which I forward to your office, for the inspection of those who feel interested in this valuable speculation: the rocks of tin you will receive on Monday. We have the mines in excellent course of working, and shall speedily accomplish our surface operations, as the weather has become more settled. Things altogether are looking very well; and I have no hesitation in saying, from present prospects, that we shall have a lasting and profitable undertaking.—James Chynoweth: April 1.

WEST SHEPHERDS.—The winze we were sinking in our western level, from the 12 to the 20 fm. level, is holed, and a pitch set on each side of it. Each of the pitches are taken to work for 21s. per ton of silver-lead ores, which is calculated to be about 1s. 6d. out of 1*l.* There is no material difference in the leader of lead in our bottom end now than when reported last week; it is still very good, only the end is a little harder.—D. Skewes: T. Hooper.

WEST WHEAL JEWEL.—In the 115 fm. level, east of cross-cut, on the Wheal Jewel lode, the lode is 20 in. wide, looking very promising for ore, ground favourable for driving—drove last month 2 fms. 0 ft. 6 in. In the 100 fm. level, west of cross-course, on Wheal Jewel lode, the lode is 9 in. wide, worth 3*l.* per fm.—drove last month 1 fm. 2 ft. 6 in.; in the winze, in the bottom of the 100 fm. level, east of cross-cut, on Wheal Jewel lode, the lode is 18 in. wide, producing little ore—sunk last month 2 fms. 5 ft. 6 in. In the winze, in bottom of the 85 fm. level, west of cross-cut, on the same lode, the lode is 1 ft. wide, unproductive—sunk last month 1 fm. 5 in. In the 70 fm. level, west of Williams's cross-course, on the same lode, the lode is 9 in. wide, worth 6*l.* per fm.—drove last month 1 fm. 5 ft. 6 m. In the 30 fm. level, west of Quarry shaft, on Tolcarne tin lode, the lode is 1 ft. wide, producing some good stones of tin—drove last month 1 fm. 5 ft. In the 12 fm. level, west of Quarry shaft, on the same lode, the lode is 18 in. wide, worth 10*l.* per fm., drove last month 2 fms. 3 ft.; in the winze, in the bottom of this level, the lode is 20 in. wide, worth 18*l.* per fm.; the stopes, east of Quarry shaft, in the same level, are worth 12*l.* per fm.—stoped last month 8 fms.; in the stopes, in the bottom of the adit, east of Pryor's winzes, on the same lode, the lode is 2 ft. wide, worth 15*l.* per fm.—stoped last month 7 fms.; in the adit end, west of Quarry shaft, on the same lode, the lode is 1 ft. wide, worth 12*l.* per fm.—drove last month 1 fm. 4 ft. 6 in.; in the 12 fm. level, west of old sump, on the same lode, the lode is 1 ft. wide, worth 10*l.* per fm.—drove last month 2 fms. 1 ft.; in the 12 fm. level, east of Reeves's winze, on the same lode, the lode is 6 in. wide, producing some good stones of tin—drove last month 1 fm. 1 ft. 3 in.—Richard Jones: April 5.

WEST WHEAL MARIA.—The eastern engine-shaft is down 33 fms. 4 ft. 3 in.; the lode in this shaft is about 5½ ft. wide, producing good stones of ore, and of a more promising appearance than I have seen it for some time past—ground more favourable for sinking; at the western engine-shaft the sumpmen are in full operation in sinking under the 54 fm. level, and our engine and pitwork are in first-rate working order; the lode in this shaft is about 2 ft. wide, producing spots of ore occasionally; in the 54 fm. level, east of this shaft, the lode is about 2 ft. wide, composed of capel, spar, mundic, with spots of ore in places; in the cross-cut south, in this level, there is no important alteration.—T. Rodda: April 6.

WHEAL ADAMS.—The lode in the 60 fm. level, south of the engine-shaft, is 20 in. wide, composed of spar, with spots of lead, jack, and mundic. The 50 fm. levels south, on the eastern and western lodes, are still breasted up, until the 60 fm. level shall have been driven far enough in that direction to unwater them, when we shall resume the driving of both these levels; we have set four men to commence a rise above the 50 fm. level, on the western lode, to lay open and unwater a piece of ground to the south of the last communication made (to set it on tribute). The lode in the 40 fm. level south is 2 ft. wide, and worth 6*l.* per fm. The ground in the 28 fm. level west is still in the elvan course, and the ground hard; we have also set the 28 fm. level, north of the old engine-shaft, to clear and secure, in order to drive this level northward, to prove that part of the mine. We have likewise set a cross-cut, to drive west of the old engine-shaft in the 18 fm. level, to intersect (if possible) the western lode, and to drive north on it; the tribute pitches, on the whole, are much the same as they have been for some time past. We intend sampling our parcel of lead ores next Saturday, which we estimate being worth 400*l.*—William Lean: April 7.

WHEAL ANDERTON.—*March* 25.—We have cut through the lode in the plat in the 60 fm. level; it is 9 ft. wide from the north to the south wall; the leader, or principal part, is 4 ft. big, the other portion of the lode being composed of capel and elvan, mixed with spots of tin, the principal part of which will pay well for stamping; we only commenced a few days since breaking any part of the leader, and have since drawn up upwards of 50 kibbles of excellent work; indeed, as good as ever I saw, and shall shortly sample a parcel of tin preparing. The lode in the 50 fm. level, east of shaft, is 5 ft. wide, promising the same character as the lode below, but not equal in richness; the lode west at the 50 fm. level is 3 ft. wide, producing good work throughout, and which is now in course of being stamped.——*March* 28.—A cross-course in the 60 fm. level east, has removed the lode north; but the lode holding so powerful in the 50 fm. level east, every encouragement is afforded, that we shall again take it in driving a few fathoms; the lode is going down nearly perpendicular.——*April* 1.—The lode in the 50 fm. level east, is full 5 ft. big, and we have not yet cut the north wall; the copper and tin lodes have formed a junction, being only separated by the south wall of the tin lode, and north of the copper; in the 50 fathom level west, the lode is 3 feet wide, all good saving work, yielding about 5 cwts. of black tin per 100 sacks of 12 gallons; a rise has been set to-day in the back of the 50 fm. level, to communicate with the 40 fm. level, for the purpose of ventilation, as well as affording facilities to stope away the tin ground between the two levels, having broken good stones of tin work in the 40 fm. level; a pitch has been also set at 6s. 6d. in the 1*l.* We have commenced driving west from the plat in the 60 fm. level, but at present no lode has been taken down—the main part being in the north wall, 4 to 5 ft. big; the cross-course referred to in a former report has been intersected 3 fms. east of the shaft in the 60 fm. level, as I anticipated, and have commenced to drive north-east, to take the lode in that level, the lode having so fine an appearance east of the cross-course in the 50 fm. level. I have forwarded samples of tin ore to different smelting-houses, to ascertain the best price that can be obtained for a few tons of black tin.—J. Carpenter.

WHEAL CONCORD.—I have placed two men to costean north from the lead lode, where I hope some valuable discoveries may be made. In the 38 fm. level south we have not yet extended far enough to intersect the south lode, but there is more water issuing from the end, which indicates it to be near; in the 38 fm. level west the lode is 3 ft. wide, the north part quartz and killas, and the south part a branch of decomposed slate, impregnated with lead. In the rise, above the 28 fm. level west, the lode is 3½ ft. wide, spotted with lead; it will, I presume, be judicious to communicate this rise with the level above (the 20), to prove the lode, and produce ventilation, &c.—by which means we shall be enabled to prosecute these levels with more facility. The lode in the 20 fm. level west is 3 ft. wide, a mixture of quartz and clay slate, with carbonate of iron, sulphate of barytes, and particles of lead disseminated through it. The lode in all the western levels is of a very kindly description, and I see no reason to alter my former opinion, that there are very good indications of a large deposit of lead before us. About 20 fms. farther west than our ends, there is a cross-course, which, I am inclined to think, will make a favourable change in the lode when we get near it. The stopes, in the bottom of the 10 fm. level, look well. I would suggest to the committee, to take into serious consideration the propriety of sinking the mine deeper. Many mines have proved rich at shallow levels, and after becoming poor in the bottom, have again made rich below; the same may be the case here, and, to give the mine a fair trial, it ought to be proved without delay. We have almost every necessary material for the purpose—so that there would be very little extra outlay required; and should this proposition be adopted, we can first communicate a winze from the 38 to the 50 fm. level, in which rods can be fixed, connected to the engine, and then sink below the 50 fm. level, on the course of the lead lode. By this means, we could get deep enough for another level, in about half the time it would take to sink in the bottom of the engine-shaft and cross-cut to the lode, which, it must be obvious, would be the best mode of proceeding. Several items in our expenditure are considerably diminished, as will appear by the next cost-sheets, and the heavy bills are all charged close up; and if you think well of sinking deeper, it will materially develope the mine, and the cost will not exceed what it has been in former months. The price (13*l.*) obtained for the last parcel of ore is very gratifying.—J. B. Clymo.

WHEAL EMMA.—This day being the monthly setting, the engine-shaft was set at 21*l.* per fm.; the ground in the shaft being had for sinking, therefore a greater price is required, although in sinking a change may take place for the better—the depth of the shaft below the 22 fm. level, is 5 fms. 3 in. In the end, driving east, on the north lode, the 22 fm. level is somewhat improved, driving under the hill or high ground, carrying a branch in the hanging wall, composed chiefly of mundic, and spar, and spotted with ore, which are favourable indications—price for driving, 65s. per fm.—H. Choake: April 3.

WHEAL LOUISA.—We are still driving on the course of the lode in the 20 fm. level; and I am much pleased to inform you, that the lode to the east of the cross-cut is greatly improved since my last report, being full 10 ft. wide, interspersed with copper throughout, and occasionally yielding excellent stones of ore; from which appearances I have put two additional men to facilitate the work, knowing that the cross-course is not far in advance, wherein large returns of ore are expected. To the west of the cross-cut, the lode is much the same as when I last wrote you, being a very promising lode indeed. I am glad to find the whole of the shareholders have consented to sink another 10 fms. with all speed, being convinced that we shall have a first-rate mine. Capt. Treloar has inspected the mine during the last week, and as given it his his opinion, that she will become one of the first copper mines in Cornwall.—James Chynoweth: April 6.——P.S. Many mining captains have inspected our mine, and have spoken of it in the highest terms, being unacquainted with each other's reports.—J. C.

WHEAL TRELAWNEY.—Phillips's engine-shaft is sunk 2 fms. under the 42 fm. level, in favourable ground. The lode in the 42 fm. level north is 2 ft. wide, and worth 18*l.* per fm.; in the same level south it is 3 ft. wide, and worth 35*l.* per fm. The lode in the 32 fm. level north is 2 ft. wide, worth 16*l.* per fm. The winze under the 32 fm. level is holed to the 42 fm. level; the stopes are looking just as usual, producing fair quantities of lead Trelawney's shaft is sunk 5½ fms. under the 22 fm. level. Vivian's shaft, north of Trehane, is sunk 6 fms. below the surface. The parcel of ores, computed 66 tons, was sold on 25th March, to Messrs. Walker, Parker, and Co., at 15*l.* 13s., and the 16 tons to the Combmartin and North Devon Company, at 5*l.* 10s. per ton.—P. Clymo, Jun.: April 5.

WHEAL ST. ANN.—Since last reported, Graham's engine-shaft has been sunk 11 fms., through a beautiful strata of decomposed granite. We are now erecting a horse-whim, which I hope will be put to work on Monday next, when we shall again commence sinking the shaft. We expect to intersect Pidsley's lode at a depth of 26 fms.; this lode has been intersected 40 ft. from surface, and found to be from 5 to 6 ft. wide, producing large stones of pale yellow ore and mundic. I am placing great confidence in this lode: when again intersected, I hope my expectations will be fully realised.—John Penrose.

FOREIGN MINES.

ALTEN MINES.—*Mining Report from 7th to 21st Feb.—Raipas.*—During the last fortnight, the appearance of the several workings have undergone little, if any, change. Carr's lode is still irregular, and the produce from the roof stope is fluctuating; in the course of a few days, we hope to commence working the foot stope, where we may expect greater regularity. Labouchere's lode maintains the same kindly prospects, and yields good returns. In the 5 fm. level, towards Monk's shaft, we have a small but regular branch of ore; and, by the latter part of next week, we shall have probably completed the communication with Labouchere's. The bunch of ore found in Monk's shaft, although confined, continues to yield fair returns of low quality ore. Our attempts to clear the run in shaft No. 2, where one of the most profitable bunches of ore lies buried, has hitherto been unavailing; and it will be necessary to postpone this undertaking until the summer, when it will be effected for less than half the expense that would be required at this inclement season. We have again had open water on the fiord for a few days, but have only been able to return two small cargoes of ore to the smelting-house since the January delivery. The ore-floors at the mine, as well as at the shipping place (Bossikop), are full of ore, and we shall use every dispatch in returning it. The sloop is now on her way with a cargo of best dredge, of about 16 to 20 per cent. In the accompanying note of ore delivery for January, the per centages will be found less than usual; but this must always be the case during the dark season, when all the ore-dressing operations are performed by candle-light or lamps—and the difficulty of distinguishing the various kinds of ores is then very great, even to the most experienced eye.

United Mines.—A trifling improvement is perceptible throughout the several works, which will enable us to increase the produce of the present month. In the level the lode is large and productive, and the returns from the new stope exceed our expectations. The tributers at Woodfall's are also raising some good ores, and, we hope, of a better quality than those of last month.

Ryper's.—The prospects of this mine are less flattering than for some time past: there is now a visible deterioration in all the workings; and unless an improvement shortly takes place, it will be advisable to employ the men on some of the other and profitable branches of your establishment.

Mancur's has also fallen off; but this circumstance, from the general fluctuating character of the lodes, is of less importance, and will not materially affect the general produce. The cost of this mine has now undergone a considerable reduction, and if the returns for the present month be less, the result of the operations will be more favourable than formerly.

Michell's.—The shallow adit has been holed to shaft No. 4, and will be continued easterly, for the purpose of draining the shallow workings in that direction. The whole of the operations are making fair and profitable returns, and the prospects continue good.

Cole's.—The produce of this mine has increased, but the quality of the ore is low. We are now obliged to carry on all our dressing operations in the open air, and the quantity of ice and snow at this season renders this one of our most tedious and difficult processes. The prospects of this new branch of the concern promise to yield a fair supply of fluxible ores for the smelting-house.

Old Mine.—The workmen enter into the spirit of the new system of tribute, introduced this month, much more readily than anticipated. At this mine some profitable returns have been made; and the success of the adventurous workmen, induced to enter into this system of working, has given rise to a desire for competition, which will undoubtedly prove reciprocally advantageous to the workmen, as well as the proprietors.

Quenvig.—The produce of these lodes is comparatively small, but now profitable. There is still too little snow on the ground to enable us to drive down the ore, but we hope to be able to do so in the early part of next month. On the whole, the prospects continue as good as at any time during the last twelve months; and from this time, without the intervention of any unforeseen or untoward circumstances, we may expect increased returns.—S. H. Thomas.

IMPERIAL BRAZILIAN MINES.—*Congo Soco, Feb.* 3.—In the back of the shallow level, west of Blamey's shaft, we have obtained rather more than a box of work for the washing-house, which has given us rather more than 3 lbs. of gold. The stamps supplied thence show some improvement, and we are not without hopes of obtaining more, though our expectations are not high. We have opened a rise from the 14 fm. level to the surface west of Duval's shaft, in which some tolerable samples have been obtained. The other parts of the mine, and our operations at Catta Funda, present nothing calling for observation.—W. J. Henwood.

Gold workings for the month of January, 12 lbs. 11 ozs. 8 dwts.

NATIONAL BRAZILIAN MINES.—*Cocaes Mine, January* 23.—We have the pleasure to wait upon you with a report on our mining operations since the 13th inst.; and are glad to say, that our works have been carried on very favourably indeed. The stopes are not yet in very good working order, nor will they be before we extend the level north from the Bandeira, and the open cut a little further in that direction. These stopes present a very favourable appearance, and are equally extensive to those on the eastern side of John's winze, now called Oxenford's stopes.—J. Hitchins: T. Johns.

Gold returns.—Mks. 19 3 2 28.

ST. JOHN DEL REY MINES.—*Morro Velho, Jan.* 18-20.—The supply of ore is improving again this week; the new hauling machine is to go to work.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

Mining in the North of Cornwall.—In compliance with your request, I now furnish you with a few brief remarks relative to the mines in this locality, which at present possess very great attraction. Great Wheal Michell, about two years since, was taken up by a few gentlemen in the neighbourhood of Bodmin, when, soon after, some of the beautiful gossan, &c., from the back of the lodes, was shown to the adventurers of Wheal Maria, who sent their agents to look at the mine, which was then in its infancy. They were much pleased with the splendid appearance of the lode, and those with whom they were in correspondence bought about 100 of the 128 shares, at a considerable premium. The sett, being very large, was then divided in two parts, one called Great Michell Consols, and the other West Wheal Michell. East mine was subdivided into 2560 shares, and worked separately; but, as the West Wheal Michell sett ran over some very good land, an arrangement was made with the proprietor of that land to abandon this mine, in consideration of another sett being granted to the same adventurers, and now called West Wheal Rough Tor Mine, which adjoins Great Rough Tor Consols, and into which the lode from that mine runs, it having been costeaned to within 6 or 7 fms. of the boundary. West Wheal Rough Tor is to be worked as a distinct sett from Great Michell Consols. It is generally considered, that Great Michell Consols, West Wheal Rough Tor, and Great Rough Tor lode is one and the same. There is another sett taken by the Great Michell Consols adventurers, called East Wheal Michell, immediately adjoining to, and on the east of, Great Michell Consols; but it has not yet been determined, whether this sett shall be worked separately or not. Great Michell Consols has about 1000 fms. on the run of the lode; East Wheal Michell about 350 fms., with about 250 more likely to be obtained, making 600 fms.; and West Wheal Rough Tor has about 1800 fms. Both Great Michell Consols and East Wheal Michell can be worked by water-power, and distinct from each other—the former having extraordinary advantages in that respect from the River Camel, in addition to the stream now working a wheel, which is equal of itself, without the water of the Camel, to put the mine from 100 to 150 fms. deep. East Michell will have the benefit of this latter stream, and in West Wheal Rough Tor considerable water-power can be obtained—these are very great advantages. As to the prospects of the mines:—First, we have Great Michell. Here the lode, where opened at the surface, shows the most unerring indications of ore; there is gossan of the finest description throughout the lode, which is 8 or 10 ft. wide. A 22 fm. level, from the surface, has been reached, and 50 or 60 fms. driven on the course of the lode, which keeps its size, the gossan continuing in large quantities, mixed with stones and rocks of ore. From this level 20 tons of ore have been raised. The shaft is now down to a 32 fm. level, but is intended to be sunk to a 35, previous to cross-cutting the lode and driving upon its course. A small piece of the lode has been carried down with the shaft from the 22 to the 32—this part is producing rocks of ore, mixed with fluor-spar and mundic, and has a most promising appearance indeed. About 35s. per 2560th share have been paid in Great Michell Consols, leaving at present about 800*l.* in hand, and which sum is considered to be sufficient for bringing that mine into a profitable state. A balance of 221*l.* 12s. 6d., transferred from West Wheal Michell to West Wheal Rough Tor, will be more than sufficient to open upon the back of the lode there for a considerable distance, to prove its character. Before half that sum was expended in the adjoining sett of Great Rough Tor Consols, such were the prospects, that the mine has been, and is now, selling at a premium of more than 12,000*l.*

Callington Mines.—The Callington adventurers are, at last, enjoying the fruits of well-directed erections, effective machinery, &c.—the dividends being now looked upon as tolerably regular. It will be seen, by the reports, that the lead lode, lately cut in the lowest level, is looking well; and there is an abundance of well-ventilated tribute ground laid open. Looking at the rich pile of gossan, taken from the Kelly Brae lode, one cannot help falling in with the opinion of all competent judges who have inspected it—viz.: that gossan of such a promising character, seldom fails of being the forerunner of a good course of ore. There are also other copper lodes besides this, which may be deemed worthy of a trial at a future period; and it has been frequently stated by many miners, well acquainted with the district, that some of the south lodes are not at all unlikely to be productive of tin, if fairly proved, to the east of the cross-course. The lead ores have continued to be very rich for silver from the surface to the lowest levels; nor should it be omitted, that there is a soft elvan course, of a light colour, which crosses the lead lode, and which is looked upon in a favourable light by the agents, as influencing the richness of the ores.

Caradon Consols.—I am just returned (Tuesday, the 6th), from the meeting held this day, which has been adjourned to the 20th inst.; in consequence of several parties being desirous of quitting this unprofitable concern, and resigning their shares, it was deemed advisable to adjourn, and issue a circular requesting every shareholder to signify his wish either to retain or relinquish his holding, by letter addressed to the purser. As soon, therefore, as these points are ascertained, it will be determined how the operations, financial or otherwise, shall be carried on.

Caradon Wheal Hooper.—The improved prospects of the South Caradon Mine, particularly in the south lodes, have tended to heighten the expectations of the Wheal Hooper adventurers. It is well known, that the lodes in this sett are only a few fathoms to the south of the above-mentioned mine; and, if this channel of ground should fortunately partake of the metalliferous character of the granite above, she will rapidly emerge from the present depression. From what has been seen of the lodes, they are large and regular—the stratum being killas, resting on the foot of the Caradon hill.

Dartmoor Mine.—My opinion respecting Dartmoor and its borders is, that if half—I might say, a quarter—of the money spent in foreign mines to a great loss, had been spent on Dartmoor, hundreds of our countrymen, women, and children (I mean boys and girls), would have had employ; and, instead of so much money carried to other lands, to a great loss, I have no doubt but those speculating parties would have received a fine interest for their outlay. Dartmoor has produced large quantities of tin; but what quantities we cannot get a correct account. One thing I am certain of—that is, the ancients have strained almost every valley on the moor for tin—they must have returned

large quantities; besides the number of times to work on Dartmoor at our period, shows what must have been the result—this stream of tin being, by the convulsion of Nature, thrown off the back of the veins. The tin being the most specific gravity, it settled down in the valleys. The ancients in streaming cut a great many lodes—some of these they worked as far as their abilities would permit them at that day. I have seen hills of considerable extent cut through by them on the lodes. On this, in more modern days, there has been but a very partial trial of the lodes on Dartmoor. It is true, a good deal of tin has been risen on Birch Tor (late Vitifer), by a company who would have abandoned her; and I have no doubt but the present company will return large quantities of tin; also, Hillborrow Mine has returned large quantities of tin. I visited that district about 12 months since; the appearance of the strata, and the other appearances, led me to believe that large quantities may be risen by a spirited company. I do not know personally anything about her underground operations. There are a few other places where tin has been risen—all of which is but a very partial trial of Dartmoor. No miner, geologist, or mineralogist, but must be at once convinced that Dartmoor, with some miles circuit from the granite in the clay-slate formation to the west, north, south, and east, will produce almost every kind of metal required for the comfort of man. I believe Devonshire is a neglected county for mining; it must and will come, when Devon will be found equal to Cornwall.

EAST CROWNDALE.—A good bunch of tin has been discovered at this mine during the present week, in the workings of the old miners, on the Rix Hill lode. The size of the lode is about 18 to 20 in. wide, 6 in. of which is most excellent work. I never saw better stones than have been broken: if it continues, nothing can prevent our having a good mine.

HAFOD-Y-LLAN.—These mines are situated in the county of Carnarvon, extending over 1650 acres, with numerous veins, or lodes, of copper and lead ore running through the sett, and is held upon a term of 14 years, subject to a royalty of 1-10th. About 150 tons of copper ore, and 30 tons of lead, have been raised, and the mine has been put in an effective state of working, the machinery being of the best construction. The property is, we understand, in a position to make immediate returns. We expect to be in possession of more detailed information on an early day, which we shall lay before our readers.

HARROWBARROW OLD MINE.—I visited this quarter on Monday last; the mine at surface wears a very pretty appearance, with her stamps, hutches, Brunton's machines, burning-house, &c., in a small compass, neatly put out of hand. There is a quantity of tin stuff in the hutches, but what the returns will be is another thing. I am doubtful they will find a quantity of waste, in the shape of wolfram, &c.

HARROWBARROW CONSOLS.—This sett, and the material, have been sold to a party, in connection with Old Harrowbarrow Mine, for 105*l.*, and it is generally supposed will be annexed to this mine, and worked together—for it is only on this supposition, that I can account for the *unaccountable* manner which certain of the parties have pursued in the abandonment of Harrowbarrow Consols, and afterwards purchasing it.

HOLMBUSH.—A report is current, that the Holmbush company have it in contemplation to work their mine with increased energy. This once lucrative adventure, cannot be said to be much more than half proved; and it is the opinion of the old miners in the neighbourhood, that the ironstone in the bottom—by no means an unfavourable feature—ought, without further delay, to be sunk through, and levels extended under the ground formerly productive. For the information of such as are ignorant of the locality, it may be added that this mine is situated at the foot of Kit-hill, the summit of which is granitic, with elvan courses running through it, while the base is a rich porphyritic killas, most favourably located for mineral deposits. Seeing there is a powerful 80-inch engine *in situ*, and parallel lodes not fairly tried, some of which are tolerably rich for tin, with the advantage too of cross-courses running through the sett, there is a strong probability that success will accompany a generous outlay. At any rate, it is a well-attested fact, that mines similarly circumstanced have, after a further trial, ultimately proved remunerative.

NORTH UNITED MINES.—At a meeting of adventurers, held on the 31st ult., the following statement of accounts was presented by the purser (Mr. Higgs, Penzance), and allowed:—Labour cost for four months, to end of January, 296*l.* 10s. 1d.; carriage, 7*l.* 3s. 10d.; materials, 71*l.* 11s. 2d.; balance against adventurers to end of September, 168*l.* 0s. 7d.; call on 6-100th share, held on account of adventurers, made 2d Dec., 1846, 24*l.*=567*l.* 5s. 8d.—By call of 4*l.* per share, 2d Dec., 1846, 400*l.*—leaving balance due to purser, 167*l.* 5s. 8d.

TOLPETHERWIN MINE.—This sett is situated near Two Bridges, in the parish of South Petherwin, and extends over a surface of nearly one mile in length, and three-fourths of a mile in breadth; royalties, 1-15th. Two lodes, bearing east and west, have already been discovered; one underlaying south, at an angle of 20°, and is about 1½ ft. wide, composed of copper ore and gossan; the other is a copper lode, from 3 ft. to 4 ft. wide, and underlies north at an angle of 45°, on which lode an adit level has been opened about 30 fms. in length; the leader of the lode is on the footwall, and from which I broke some copper ores of very fine quality; it is a strong masterly vein, and the appearances are very encouraging; from the indications, I entertain an opinion that this lode will yield very productively. These premises possess the advantage of a permanently powerful stream of water, which can be applied to drive a wheel of 30 ft. diameter, and the breast 4, 5, or 6 ft., as may be required, which will be sufficient power to drain the mine of water to considerable depth, and enable the proprietors to realise at comparatively little expense, when compared with steam-power.—JAMES GRIPE. ——Agreeable to request, I have inspected Tolpetherwin Mine, and have to report very favourable appearances of produce of copper, all through the parts of the mine—in fact, I procured, while underground, some very fine specimens of copper ore, which I send, from the principal lode, and some good gossan, prian, flookan, and other kindly materials, from sundry other parts of the lode; on the whole, of what can now be seen at the mine, I pronounce it a very kindly mine, well worth the attention of speculators to carry out. It appears, that from driving a cross-cut at the 20 fm. level towards the lode, a sudden issue of water from that level stopped that work; the power of horse-whim and barrels not being adequate to remove the water, indicates that the cross-cut is near a lode, and, from its being porous, may be considered a very kindly token of a great improvement in depth. I find the sett is very extensive east and west, and it is also sufficiently extensive north and south; you also having referred to me for information relative to the application of greater power to work the mine effectually, I beg to inform you, that I have carefully surveyed the levels for procuring water-power from the river, and am glad to inform you, that a water-wheel may be erected 30 ft. diameter, 4 ft. in breadth, to work at any season of the year—this power will be equal to put the mine 50 fms. deep; I have also, as requested, measured the distance for a leat, required to be cut, as well as the channel required to carry off the water, and have made an estimate of the expenses of such, as well as the building and erecting a wheel, as described above, rods, bobs, pumps for the depth of 30 fms. and other necessary materials for the completion of the machinery, and find the amount in total will not exceed 500*l.*; I consider the most feasible plan you can adopt, is to apply such machinery immediately, and I trust the favourable anticipation we have of the result will be realised. I shall be most happy to give you any further information in my power relative to the mine; I have also to state, that in the event of its being required, additional machinery and equal power to the before-mentioned, can be had from the river, which comes from Alterson, and united with the Iney, in the Tolpetherwin sett.—J. DAVEY. ——We beg to hand you our report of Tolpetherwin, which is situated in the parish of South Petherwin, and is about two miles north of the noted granite hills, called Killmar, and Hoaks Torr, and about five miles due east from the Great Wheal Rough Torr. This mine was first opened by Messrs. Gill and Rundle, bankers, of Tavistock, under the superintendence of that most celebrated agent, Capt. Henry Brenton. This company opened a pit, about 9 ft. deep from the surface, on the lead lode, out of which they returned about a ton of lead, the produce of which was 52 oz. of silver to the ton, after which the lead brought 14*l.* per ton. This company would have gone on vigorously, but by reason of the landholder (the late Squire Archer) claiming such high dues as 1-10th, they abandoned it; however, since that time Mr. Darke, being steward for the present squire, having received several applications for this sett, was inclined to go into it himself, after which he drove a cross-cut upwards of 20 fms., and cut a most splendid copper lode, underlaying north, and its longitudinal direction is about 12° south of east; he then drove on the course of the lode about 3 fms. east of the cross-cut; the average size of this lode is about 4 ft. wide, impregnated all through with spots of yellow copper ore, and good stones of copper ore can be broken; the remainder is a gossan flookan, which indicates strongly for a good copper lode; the strata is a light blue killas, which, of course, is congenial for copper. They then sunk on the course of the lode, in the bottom of this level, I think about 5 fms., and broke good saving work; they then pitched an engine-shaft to intersect the lode at the depth of 40 fms., in sinking which 8 fms. they intersected another copper lode, about 4 ft. wide, impregnated with copper, flookan, and spar—this lode runs parallel with the above, and underlays north; they then sunk the shaft to the depth of 20 fms., and kept the water by the power of a horse-whim; now to this level he drove a cross-cut south, in order to cut the south lode about 6 fms., and, by so doing, they cut a large stream of water—so that they were obliged to abandon it! this water, of course, must proceed from a rich lode of copper, by reason of the kibbles being left in the water overnight, and drawn up the next morning, the men were surprised to see them corroded with beautiful copper greens; this, I should say, is certainly a good indication, as there must be copper to produce this effect; we expect if the lode takes its regular underlay, they have 8 or 9 fms. farther to drive before they cut it, and at present the ground in the cross-cut is more favourable than at the commencement. This south lode crosses a valley east of the engine-shaft, where they have driven upwards of 20 fms. on a beautiful light blue killas; although this level is not more than 3 fms. deep, yet the lode is not without copper, but not so large as in the western, still its underlaying here is about 2½ ft. in a fm. There is in this mine an extraordinary advantage of water-power, as they can take up all the River Iney on a very high wheel, we should say, equal to an 80-in. cylinder; however, there need not be a wheel of such power, we should say, a wheel 30 ft. diameter, and 4 in. breast, would be sufficient, which will cost 250*l.*, and if the mine turns out rich, this wheel would serve for other purposes, such as grinder, stamps, &c.; we have not made any calculation on the different materials wanted to prove this mine, but we should say it will cost about 500*l.* before any return can be made; we should advise you to sink the engine-shaft 20 fms deeper, before cutting the lode, the expense of which, we should say, will cost about 10*l.* per fm. This sett, from east to west, is upwards of a mile in length, and nearly a mile in breadth; there is an elvan-course, which we think will cross the lode about 40 fms. deep, and it appears to be about 4 ft. wide at the surface; now, wherever we see those elvan-courses come in contact with an east and west lode, it seldom fails from being productive; however, these things must be proved, before it can be brought to light, we can only say, we believe this mine to be a very fine speculation.—JOHN SPARGO; JAMES PIKE.——Having had submitted to me a collection of mineral specimens, the produce of Tolpetherwin Mine, and request an immediate reply, I lose no time to inform you my opinion—No. 1, a stone of gossan, exceedingly good, with strong indications for copper, but I presume contains a good produce of silver; No. 2, a good stone of copper ore, embodied in kindly materials; No. 3, a stone of copper, combined with antimony, which I suppose contains 20 per cent. of copper, taking the specimen as a general sample, I must consider you very fortunate if interested as an adventurer.—JONATHAN DAVEY: *Tavistock.*——I have examined a sample of copper ore, marked No. 3, sent by Mr. Joseph, 7, Bank-chambers, and find it contains 18½ per cent. of metallic copper. I have also examined a sample of ore, marked No. 1, sent from Tolpetherwin, Cornwall, and find it contains 31½ per cent. of lead, and 48 ozs. 3 dwts. of silver to the ton of ore.—JOHN MITCHELL: 23, *Hawley-road, Kentish Town, London.*

WHEAL BALL.—At a meeting of adventurers, held at the account-house, on Wednesday, the 31st. ult. the following statement of accounts was submitted and allowed:—Cash received for tin, sold at Chyandour, 27th March, 344*l.* 2s. 6d.; balance due to adventurers, from last account, 94*l.* 0s. 0½d.=438*l.* 2s. 6½d.—Cost for October, November, December, and January, 257*l.* 1s. 4½d.—leaving balance due to adventurers, 181*l.* 1s. 1½d.—A dividend of 2*l.* per 60th share was declared, and the prospects of the mine were said to be more favourable than ever. There is a great improvement in the 35 fm. level, the lode is 12 ft. big, worth 10*l.* per fm.—set at 5s. in the 1*l.*

WHEAL ALBERT (Plympton).—The newly-erected water-engine was put to work this day; and, although the agent, Richard Williams, Jun. (son of the talented agent of Drake Walls), and both the carpenters, were never concerned in such a work before, she went off in fine style, and is now working as smoothly as possible—indeed, the whole affair does great credit to the agent, who is also sole engineer. The water will be in fork in a day or two, and the men will then resume driving south under the old men's workings, and also on the two large branches already discovered. The tinstuff now on the plat, and broken in the levels, is computed at about 2 tons of clean tin, which, with the tin already washed, will make a respectable start; I conceive this to be a very promising concern, as the ground is a soft decomposed granite and china-clay, most favourable to mining operations, with plenty of water-power at surface, the tinstuff requiring the lightest stamps possible—indeed, most of it may be washed without stamping at all. It was worked by the ancients most extensively, and to some depth, as, although we are driving at a level of 25 fms., we holed into their works in a rise of about 8 fms. The mine is divided into 256 shares, and is held under G. Strode, Esq., of Newnham Park, at 1-15th dues, from last year.—B.

WHEAL FRANCO.—I will send you in the early part of the week the report of the general meeting of last Wednesday—it was really cheering. Capt. Edwards stated (and you know that he never excites hopes to disappoint them), that we shall be able to make a dividend at Midsummer, and continue to do so even before we cut the 47 and 62 fm. levels.

WHEAL VOR.—It was announced, some time since, that the workings of this sett had been discontinued; we have been requested to state, that it was only the deep levels which had been suspended—indeed, according to the manager, the mine had not done so well for the last 10 years as during the past six months—that is, in getting into proper working order, though not so many people were required, nor the expense so great; a new engine has also been erected, and another greatly repaired, and they are making large returns of tin.

BAROSSA RANGE MINING COMPANY (SOUTH AUSTRALIA).

The first annual meeting of this company, formed for working, in the first instance, the mineral deposits on the lands of G. F. Angas, Esq., on the Barossa Hills, in South Australia, was held at the offices of Messrs. Coode, Browne, and Co., Bedford-row, on Tuesday last, the 6th inst.

The usual preliminaries having been gone through, the CHAIRMAN observed that this was the first annual meeting as fixed by the deed of settlement, and therefore the directors had been compelled to call the shareholders together, although they had little information to give them, no advices having arrived, although they expected them daily; they had, however, prepared a report, which with the balance-sheet he would read.—The CHAIRMAN then read the following report, and statement of accounts.

REPORT.

The directors in presenting their first annual report, are unable to state the result of any mining operations by the company, no advices having yet been received from the colony concerning them. No prospectus having been published, it may be necessary they should state that the present company has been formed for the purpose of working certain lands where copper ore of great richness (some of the ore producing 33 per cent. of copper) has been already discovered, and from which specimens of sufficient magnitude have been sent to this country, to give a full assurance of success in the judgment of persons conversant with mining. These lands comprising 50 sections (about 4000 acres), are situated about 40 miles from Adelaide, on the banks of the river Gawler, and form part of, or are immediately contiguous to the Barossa range of hills, which stretches north and south through, or adjacent to, the lands in question. The very favourable geological formation of the neighbourhood, and consequent probability of minerals, were great inducements in the original selection of the lands by the proprietor for purchase from the Government—the opinion of Professor Mengé having been taken in the selection. The Kapunda Copper Mine is about 12 miles distant on the same range of hills, and in the same geological formation. Two well defined copper lodes running nearly east and west, have already been discovered in the lands included in the company's lease; the back of one of these lodes has been traced for upwards of 200 yards, but so far as is yet known it has been opened upon only for a few feet in depth, and length on its course; the examination, however, has led to the discovery of rich strings of ore (from which the specimens above alluded to were taken), tending downwards between two well defined walls, about 7 ft. apart; both lodes take their course into the hills on either side of the valley of the Gawler; and having regard to the uniform experience of the South Australian Mines, that the ores are found contiguous to the surface, it may be confidently stated that mining operations may be extensively carried on without any other process for draining, than will be afforded by an adit taked up from the level of the Gawler. In the month of May last, the directors engaged several miners, and shipped them for the colony, with tools, and other requisites. In June, other miners, an experienced manager, and a further supply of all sorts of mining implements were sent to the colony. On the latter occasion the directors remitted 1000*l.*, for the purpose of prosecuting the operations of the company; they at the same time formed a board of supervision in the colony, to regulate its expenditure, &c., and established rules for the guidance of that board.

The proprietor of the lands, the immediate subject of the company's operations, has consented to give the company the benefit of a selection from all his lands in the neighbourhood, on the same terms as the original grant—and these are of very much larger extent. The directors regard this as an important feature of value in the company's affairs, since it multiplies the chances of success, and may give occasion for more extensive operations. They have indirectly intelligence of the arrival of both vessels at Adelaide; and, by the next vessel from the colony, they hope to receive full reports from the manager and the board of supervision.

In the *South Australian Register*, published at Adelaide, on the 19th of August last, it is reported that "the mines on the Barossa survey of G. F. Angas, Esq., are about to be worked instanter. An experienced miner, per *Canton*, has inspected the locality and its products, and feels perfectly satisfied of their value. The first party to attack this formidable affair started yesterday for Angaston, where, for the present, they will be located."

The whole of the original calls have been paid up, and the balance shows that there has been disbursed, in advances to the manager and miners, for their passage, and in the purchase of tools and materials, the sum of 617*l.* 13s. 7d., and that there has been 1000*l.* remitted—leaving, after deducting the expenses of forming the company, a balance in the banker's hands of 24*l.* 11s. 2d.—Pursuant to the deed of settlement, the year of office of directors and auditors (whose services have been gratuitous) now expires, and they all offer themselves for re-election.

Dr.	*Balance-Sheet.*		
1846—May 28.—Amount remitted to the colony	£1000	0	0
Amount paid in England on account of passage-money, materials, stores, wages, the expenses of the formation of the company, and one year's current expenses for secretary's salary, offices, &c.	935	8	10
Balance	246	11	2
Total	£2202	0	0
Cr.			
1846—Amount of deposits received	£2202	2	0

After some conversation as to the number of shares, and the desirability of subdividing them, and extending their number, in order to raise further capital if necessary, the CHAIRMAN explained the course the directors had adopted for securing the interests of the company in the colony. They had sent out Capt. Rodda as manager, with a staff of miners, stores, &c.; they had appointed a board of supervision in Adelaide, consisting of Mr. Angas, son of G. F. Angas, Esq., who resides in the colony, Mr. Sleman, a gentleman in Adelaide, well acquainted with mining, and Capt. Rodda, the manager. Mr. Angas would have the sole power over the cash transactions of the company, receiving the accounts from the manager, and drawing cheques on the bankers for the amount; and Mr. Sleman would visit the mine monthly, and report on the state and prospects of the undertaking. The sett extended over 4000 acres, and Mr. Angas promised the company the option of taking up any other mineral land on his property, consisting of 40,000 acres, in preference to any other party. The company were also empowered by their deed to work any other mines which might promise to be remunerative, without involving a large first outlay—the principle on which the company was formed, being the pursuit of mining on a royalty, without paying heavy premiums. It was then decided, that an extraordinary general meeting should be held as soon as convenient after the receipt of the next advices from the colony, when the question respecting the subdivision of shares, is to be considered, and decided upon. The report and balance-sheet were then received and adopted, and a series of resolutions having been passed, for which see our advertising columns, a vote of thanks was passed to the chairman, and the meeting separated.

COOMBE VALLEY SLATE COMPANY.

The first special meeting of shareholders was held in the committee-room of the office, 5, Whitefriars-street, London, on Thursday last, the 8th inst.

Mr. WM. HOOKE in the chair.

The notice calling the meeting, and the minutes of the previous meeting, having been read, the CHAIRMAN proposed, that the secretary give a full description of the present and future working of the quarry.

Mr. RICHARDSON (the acting manager and secretary) then gave a detailed account of the quarry from its first commencement, describing its rise and progress up to the end of March; illustrating the workings by a series of drawings, which were got up in a very engineer-like manner. He here produced specimens of the slate, raised from the rock at every 5 ft. in depth, showing the gradual improvement in quality as the quarry became deeper; and finally producing a piece of slate of about an inch in thickness, that had undergone a test by immersion in water of several days. The slate had been very accurately weighed, and, after being taken from the water, was found not to have absorbed the least possible quantity of the fluid, the weight being found to correspond exactly with its weight before subjected to immersion; and, moreover, when scratched by a sharp instrument, the fractured particles came off in the form of a dry dust—thus proving, beyond a doubt, the slate to be perfectly *non-absorbent*. Some pieces were then produced that had been planed and polished, and presented an appearance that was pronounced highly satisfactory. The prospects of the company were then dilated on at considerable length, which, from the concise and lucid manner set forth, were highly complimentary to the system of management. The principal feature of a positive nature was, that the captain of the quarry, with only six men and one horse, had raised 35 tons of slate in one day, and that this work was achieved by the horse-whim alone. The estimates were carefully examined, and the current expenses of the past month audited and passed. This descriptive address, which occupied the close attention of the meeting for nearly two hours, was received with the greatest amount of confidence by every shareholder present.

Resolved,—That two-thirds of the capital, now on hand, be immediately devoted to prosecute the works on the quarry; and that all necessary machinery be purchased and erected for that object.

Resolved,—That persons holding letters of allotment, who have not paid upon them, should be allowed until the end of the present month for their so doing; and that at the expiration of such time, if not paid, to become absolutely forfeited.

Resolved,—That all the remaining shares that are not allotted within two months, to become the joint property of the shareholders; and that the same should be then placed in the hands of a respectable agent for public sale, at an advanced premium—the proceeds of which to go into the funds of the company.

Resolved,—That arrangements be made for establishing a wharf, for the deposit and sale of the produce of the quarry, and that a portion of the present extensive orders on hand be executed without delay.

Resolved,—That any builder, or merchant (being a shareholder), should be supplied before any person not having an interest in the company.

Resolved,—That the improved machinery, including Mr. Richardson's recently-invented reversing water-wheel, be applied to the works as soon as the company's funds will admit of its introduction.

A vote of thanks to the chairman and committee, for their efficient services, having been passed; the meeting, after a close deliberation of six hours, terminated.

GREAT WHEAL MARTHA MINING COMPANY.

A special meeting of adventurers was held at the offices, Winchester House, Old Broad-street, on Monday last, the 5th inst.

JOHN BRIGHTMAN, Esq., in the chair.

Mr. COLE (the secretary), having read the advertisement convening the meeting, the CHAIRMAN observed that this was a special meeting, called for the purpose of adopting, or otherwise, the plan which the directors would lay before them, for raising further capital for the prosecution of the undertaking: they had found it necessary to alter the plan already submitted to the shareholders, for raising 3000*l.* as that only applied to the new mine—while the proper prosecution of the old mine might require about 1000*l.*; it was, therefore, recommended that the directors should have power hereafter, if found necessary, to raise an additional 1000*l.*, or, in all, 4000*l.*—Mr. G. THOMAS explained that Mr. P. Johnson, in his estimate, had entirely omitted the old mine. The favourable appearances in the 90 fm. level, warranted them in prosecuting that part of the mine as soon as it was drained; and as they had thought it advisable to sink to that depth from the 60, without driving, they had 30 fms. of whole ground, from which returns would, in every probability, be made. It was, therefore, recommended, in addition to the 1000 shares at 3*l.* each, to give the directors the power, should more capital be required, to issue 500 additional shares.—Mr. SERGEANT, who had just arrived from Cornwall, said he knew the mine well, and that the 90 fm. level was highly promising: he had no doubt they should make returns at the 40 fm. level new mine, most probably sufficient to cover the cost of trying the 90 at the old mine.—Mr. THOMAS then read the plan of the directors at length, which was to the effect stated in the chairman's speech, when it was resolved, that the directors be empowered to carry the same into effect. A vote of thanks was then passed to the chairman, and the meeting broke up.

The following are detailed particulars of the plan for raising additional capital:—

1. To issue not exceeding, in the first instance, 1000 new shares (to be denominated preference shares, and numbered 4001 to 5000), at 3*l.* per share—the same to be payable in three instalments, of 1*l.* per share each; the first to be payable immediately after the 30th April inst., and the subsequent two at intervals of not less than three months. The directors to have the power to issue, should the above funds be insufficient, and if they should deem it for the benefit of the shareholders, a further number of not exceeding 500 shares, at not less than 2*l.* per share—such parties now taking the above 1000 new shares to have the option of taking their pro-rata of the 500 additional shares.

2. In case the further operations should be unsuccessful, and the company dissolved, after the expenditure of the amount to be thus raised, all new shares issued and fully paid on, to be entitled to receive equally a pro-rata of 50 per cent. of the proceeds of the property, engine, machinery, &c. (including a small estate, granted by the Duchy, and equal to freehold), and the remaining 50 per cent. of such proceeds to be divided equally amongst the whole shares, original as well as new.

3. In the event of success, the new shares to be entitled to receive back 50 per cent. of the amount paid thereon, out of the first divisible profits, and afterwards to rank in every respect equal, as to risk, interest, and dividends, as the original 4000 shares. In the distribution of the 1000 new shares, each shareholder to have the option of taking his proportion according to his present number of shares—viz., 1 new share for every 4 old shares in the original capital.

4. That if any of the present holders of fully paid-up original shares, who neither wish to subscribe for new shares, nor to take their chance of successful results from the outlay of the capital to be raised by new shares, but shall prefer to retire, and to have their proportion of the net assets of the company paid to them; the engine and all machinery, &c., shall be valued at such prices as they would be likely to realize, in the event of the mines being now stopped, and the company dissolved, and the proportion of such valuation shall be paid to such shareholders so desiring to retire, pro-rata according to the proportion which the number of shares held by them shall bear to the whole existing number of original shares; such shareholders thereupon to transfer their shares.

5. Such shareholders wishing either to take their proportion of new shares, or their proportion of present net assets, must intimate their intention in writing, on or before the 30th April inst., after which date the directors will consider that such shareholders who have sent in no intimation to either effect, decline to avail themselves of either of these options, and the directors are to have the power to allot all new shares not then taken up to other parties.

TRELEIGH CONSOLIDATED MINING COMPANY.

The usual quarterly meeting of adventurers in this company was held at the offices, Old Broad-street, on Wednesday last, the 7th inst.

G. B. CARR, Esq., in the chair.

Mr. NICHOLSON (the secretary) read the advertisement convening the meeting, and the following statement of accounts:—

Dr.—Balance last account	£3076	19	6		
Ores sold	3151	19	2		
Interest and calls	5	8	5	—£6234	7 1
Cr.—Cost for three months				£1909	10 3
Bills				1031	8 7
Lords' dues				307	8 1
Law expenses for new leases, &c.				85	5 7
Directors and secretary's salaries, office expenses, &c.				146	0 6
Balance of cash and ore bills in hand				2754	13 11
Total				£6234	7 1

The usual weekly report (which will be found among our Mining Correspondence) was read, as also the following report from Capt. W. Richards:—

Redruth, April 5.—The prospects east and west of Garden's engine-shaft, in the 80 and 90 fm. levels, are very good; and I was in hopes of seeing the lode in the 100 fm. level previous to your meeting; but we have very hard ground in the shaft, and I think it will take till the end of May to see the lode at the latter level. The 100, east of Christoe's shaft, has not turned out to expectation; but we have yet to boundary 30 fms., and I expect to cut the lode in the 110, in the course of the present month—there is every prospect of raising a fair quantity of ores from this lode of good quality. At Goodfortune, on this lode our levels of late have been poor, but we have now a fair prospect in the 60 and 70 fm. levels west, particularly in the latter; and I, therefore, recommend continuing operations on this level, for at least two or three months longer. On the whole our prospects are good, and I have no doubt of giving a fair profit.—W. RICHARDS.

April 6.—P.S. I have been at the mine this morning, but there is no particular alteration, except the 80 east is a little improved, and the 100 east of Christoe more kindly.—W. R.

The CHAIRMAN observed that, having heard the reports on the state and prospects of the mine, he had but little to add, excepting the agreeable duty of declaring a dividend; the directors had well considered the subject, and they recommended the payment of 6s. per share, or equal to 5 per cent. on the capital. They were bound by the deed of settlement to put by 10 per cent. of the dividend towards a reserve fund, until it reached the amount of 3000*l.*; this would now take 150*l.*, and the dividend about 1500*l.*, leaving a balance in hand of between 400*l.* and 500*l.* The proposed dividend will be paid on and after the 7th inst. He thought it was a question, whether a small concern like the Treleigh required a reserve fund—at all events, he thought 3000*l.* too large; and, perhaps, at some future day it would be considered desirable to alter this clause in

the rules.—It was then moved by Mr. MACKAY, seconded by Mr. COMMANDER, and carried unanimously, that the accounts submitted be received, adopted, and entered on the minutes.—It was then moved by Mr. BIRDSEY, seconded by Mr. SMITH, and carried unanimously, that the thanks of the meeting be given to the chairman and directors, for their exertions and economy, by which the company had been brought to its present state of prosperity.—The meeting then separated.

THE COMPANY OF COPPER MINERS IN ENGLAND.

The annual general meeting of this company was held at their establishment, Broad-street, City, on Wednesday, the 7th inst.

ABEL LEWES GOWER, Esq. (the governor), in the chair.

The minutes of the last meeting having been read and confirmed, the following report was submitted:—

REPORT.

This is an annual general court, duly convened for the election of a governor, deputy-governor, and assistants for the ensuing year, and for those offices we beg to recommend to you the gentlemen whose names stand upon the list on the table. We also take this opportunity of explaining to you the progressive development of our works at Cwm Avon and at Swansea, and such other matters as are of common interest.

It is with satisfaction we inform you, that the important financial measure to which we specially called your attention on the 8th of April last, and which you gave your assent to on the 12th of June, has been successfully carried out. The benefit derived from the increase of capital you then accorded us the power to raise, has been great; as by its means we have been enabled to impart that degree of vigour to our operations, which was alone wanting to confirm their stability. It has, at the same time, been our desire to avail ourselves of the means thus placed at our disposal, with the greatest discretion consistent with your interest; and we have the pleasure of reporting, that, having accomplished the immediate objects we had in view, considerably within the limits you voted, we have discontinued the issue of preference shares.

The outlay has necessarily been great, by which we have arrived at so prominent a position, but we have secured an ample return by large forward contracts at remunerative prices. We have now seven blast furnaces in operation, which produce upwards of 600 tons of pig-iron per week. To four of them the hot blast is applied, which, as you are aware, so greatly increases the production, that we have deemed it advisable to authorise its application to the remaining three, and when this is completed, our make will approach 800 tons per week. The bar-iron and railway bar mills now manufacture upwards of 400 tons per week, and will be progressively adapted to work up the entire of our make of pig-iron, with the exception of that which is consumed in the manufacture of tin-plates. At the present moment, the demand for iron is very animated; and notwithstanding the very high rate of pay for labour in every branch of the manufacture, the price is such as to make it remunerative beyond the average of a period of years.

Were the calculations of the advantages we possess in our mineral property based on our present results only, we should not feel justified in making use of the expressions of confidence we now do; but we are happy to be able to add to them the assurance derived from the best information and calculations we can obtain, that we can raise an almost inexhaustible supply of rich black-band at so cheap a rate, that in times of depression no works will be in a more advantageous position than ours. Passing from these interesting topics to matters of our general government, we beg to announce to you that a committee of our court has been carefully considering what improvements could be introduced consistently with our charter; and upon the report of that committee, we have resolved to recommend that the court now to be elected shall consist of a governor, deputy-governor, and 14 assistants only. We have to announce, with regret, that the private arrangements of our deputy-govenor, Mr. NIX, have determined him not to offer himself for re-election as a member of the court of assistants; a resolution we are quite sure you will join with us in lamenting, whilst we feel that the best thanks of this court are due to Mr. NIX, for the efficient and zealous manner in which he fulfilled the duties of his office, during the time he occupied it; a portion of which period, as you are aware, was characterised by circumstances of great difficulty and anxiety to every member of the court. We are, however, happy to inform you that he retires from the court in perfect cordiality and friendship with his late colleagues. In conformity with the remarks already made, having reference to the regulation of the court of assistants, that court have resolved to recommend you to adopt as a bye-law, that—The court now to be elected shall consist of a governor, deputy-governor, and 14 assistants. The court of assistants have also resolved to declare a dividend of 7½ per cent. per annum, for the half-year, on the paid-up preference share capital. The court have also resolved to declare a dividend, at the rate of 5 per cent. per annum, on the paid-up original share capital; such dividends to be payable on and after the 26th instant.

We have now good reason to believe that the profitable results of our operations will render it unnecessary that we should again have occasion to resort to this source of assistance. In order to provide for our greatly increased consumption of coal, we have persevered in opening new levels and pits, in all of which the produce has equalled our expectations, and assured us of an adequate future supply. The present extent of our collieries is best shown by the following comparative statement:—Raised in 1845, 140,300; in 1846, 264,000; in 1847, 261,900. The price obtained for coal shipped has been good, and the demand quite equal to the quantity which we have considered it expedient to sell. At the Swansea Colliery there have been raised, in 1845, 46,400; in 1846, 50,700; and in 1847, 44,900. Consumed in 1845, 21,500; in 1846, 21,300; and in 1847, 22,900, Sold in 1845, 26,200; in 1846, 29,300; and in 1847, 22,000.

In plate, the make of the past year has been 46,873 boxes, against, in the previous year, 42,239 boxes. It has been an especial object of our solicitude to avail ourselves, during the present period of great demand, of the very valuable property in black-band ironstone which we possess, and to which we have previously alluded. A comparison of our present and previous make will not fail to convince you of the activity with which we have urged on this important.

	1845	1846	1847
Pig-iron made at Cwm Avon.....	—	3700	23,000
" " Oakwood.....	—	4800	5600
Total tons.....	8070	16,500	28,600

Bar-iron made in the last six months since the mill has been at work, 5500 tons.

The GOVERNOR.—We propose, as we are empowered by our bye-laws, to reduce our board of assistants to 14.—Mr. GOODHART wished to know, if that was the number allowed by the charter?

The GOVERNOR replied, that the charter allowed of any number of assistants from 10 to 16. He now begged leave to move a vote of thanks to Mr. John NIX, their late deputy-governor, for the very zealous manner in which he watched over the interests of the establishment while he held office.—Several proprietors rose to second it, when it was carried with acclamation.

Mr. GOODHART said, he could not help expressing his deep regret that the suggestion made by him on a former occasion had not been adopted. He referred to the appointment of auditors—(hear, hear)—so that, at the yearly meetings, they might have a regularly audited balance-sheet. He knew the charter did not speak of auditors. The court might employ accountants to accomplish the object; it would do a great deal of good, and create confidence out of doors.

The GOVERNOR could assure the honourable proprietor, that the question had engaged much of their attention, and the court had a strong desire to meet his wishes; but that, after most mature deliberation, it was determined that such a measure would be most detrimental to the interests of the company—supposing even that the appointment of such functionaries as auditors, could be brought within the charter or act, in conformity with the rules prescribed by that instrument. And the governor instanced a considerable joint-stock trading company, whose deed of settlement provided for auditors, but whose shareholders, at a late general meeting, came to a vote to do away with such officers, feeling that all publicity imparted to their affairs, militated against the prosperity of the company.

Mr. ALFRED FOWLER wished to be informed, whether the company would lose much by the failure of Messrs. Ricketts, James, and Co.?

Mr. J. J. CUMMINS could assure the honourable proprietor, that so far as the court of assistants could foresee, no loss would accrue to the company.

Mr. S. RICHARDS wished to be informed if the dividends were paid out of their profits?—The GOVERNOR answered, that the court felt justified in declaring the dividends they had done, which were made out of the profits.

Mr. FOWLER.—Have you any balance left?—The GOVERNOR said, he declined answering that question, since it would be almost tantamount to publishing the accounts.

Mr. FOWLER.—I believe we are also creditors of a firm that failed at Birmingham; he would ask if any loss would be sustained by such failure?

Mr. CUMMINS thought not.—Mr. FOWLER alluded to a loss which it was said the company had made by one Quincey, and was rather surprised to find, that any one should make a bad debt in such a quarter.

The GOVERNOR said, he would now put it to the meeting, that "the report be adopted, printed, and circulated among the proprietors," which was immediately carried.

Mr. FOWLER wished to know why circulars were not sent to each proprietor to convene them together?—The GOVERNOR observed, it was advertised in the *Gazette*.—Mr. FOWLER thought very few people looked to the *Gazette* for advertisements.

A ballot then took place, when the 14 assistants were re-elected, and Mr. J. H. Pelley as deputy-governor, in the place of Mr. J. NIX, who retired.

Mr. GOODHART could not help expressing his regret, that two old officers of the company, Mr. Cooke and Mr. Inglis, had retired from the company's service.—A vote of thanks to the governor, deputy-governor, and court of assistants, was then passed, and the meeting separated.

TING TANG.—At a meeting of adventurers, held at the account-house, on the 26th ult., the costs for Jan. and Feb. were stated to be as follows:—Labour cost for Jan., 366*l.* 14s. 6d.; merchants' bills, ditto, 263*l.* 19s. 3d.; labour cost for Feb., 254*l.* 9s. 1d.; merchants' bills, ditto, 98*l.* 11s. 1d.; tribute cost to end of January, 90*l.* 3s. 7d.=1073*l.* 17s. 6d.—By copper ore sold (less dues), 243*l.* 16s. 4d.; junk sold, 4*l.* 18s. 9d.=248*l.* 15s. 1d.—leaving balance against adventurers, 825*l.* 2s. 5d.

WHEAL COLLIER.—At a general meeting of adventurers, held at the Guildhall, Tavistock, on Monday, the 5th inst., the accounts to the end of March, having been examined and found correct, were passed, and an abstract of the reports from the manager and Capt. Carpenter, then read, directed to be forwarded to each shareholder: a call of 5*s.* per share was made, payable to the purser immediately, for the further prosecution of the mine, as per reports; and all arrears of calls to be forthwith collected. The following are abstracts of the manager's and Capt. Carpenter's reports:—Since the last meeting, the adit has intersected another lode, which I have no doubt is the one to which our attention has been turned; it is about 2 feet wide, and composed of porphyritic killas, mundic, and small particles of rich copper ore; and it is worthy of notice, that the ground near the lode contains a great deal of peach, and occasionally good stones of ore, which I consider good indications; especially as, from all appearances, there will be a junction of this lode further west, with the one from which we broke our parcel of ore. I, therefore, propose driving the end west on the middle lode, as being the course best calculated to explore the three lodes already discovered to the cross-course. In reference to the eastern part of the sett, I can only add, that the North Wheal Robert new engine-shaft has struck into the old one, and has failed to develope the lode as mentioned in my former report; but being within 20 fms. of the sett, it will render any trial on our part unnecessary at present.—J. PAULL, Manager: *Tavistock, 4th month, April* 3.——The lode No. 1, the first intersected by the adit, is from 18 to 21 in. wide, and composed of spar, capel, mundic, and spots of fine yellow copper ore, although the adit is at this point shallow. It appears to be inclining towards the middle lode No. 2, which is much larger, with very regular walls, and containing rich stones of copper ore, with as good indications as can be expected at the depth. The lode No. 3, cut at the present end of the adit, is disordered, and split into branches, with a strata of capel, or hard killas, bordering on it—but in depth you may expect a change for the better in the strata, as well as in the lode. I recommend your driving on the middle lode, No. 2, as there is a possibility of meeting with a cross-course, as you extend westward, with cheaper ground for working, and the lodes getting closer to each other, in preference to Nos. 1 and 3, as they can be proved by the present cross-cut, or a deeper one. From the eastern aspect of the surface, I believe the sett contains deposits of minerals, as such ground has been generally more productive than any other.—J. CARPENTER: *Anderton, April* 3.

BUDNICK CONSOLS.—A meeting of adventurers was held at the mine on Monday last, when the following accounts were submitted and passed:—To balance in December last, 144*l.* 14s. 7d.; cost, &c., for Jan. and Feb., 1155*l.* 16s. 4d.=1300*l.* 10s. 11d.—Ores sold (less dues), 1133*l.* 7s. 9d.; carriage of tin, 17*l.* 6s. 4d. =1150*l.* 14s. 1d.: leaving balance against the adventurers, 149*l.* 16s. 10d.

CONSOLIDATED MINES.—The usual two-monthly meeting of adventurers was held at the account-house, on the 17th ult., when the accounts, of which the following is an abstract, were allowed:—By balance at last account, 1570*l.* 2s. 6d.; ores sold (less dues), 10,001*l.* 12s. 10d.=11,571*l.* 15s. 4d.—To costs and merchants' bills for January and February, 9693*l.* 19s. 3d.: balance in hand, 1877*l.* 16s. 1d.

GOONVREA.—A meeting of shareholders in this concern was held at Farquharson's Hotel, Truro, on the 31st ult., when the accounts showed a balance against the mine of 46*l.* 18s. 6d., after crediting all the calls that have been made. It was, however, stated that there was due on arrears a greater amount than the balance, and to meet these sums, and to develope the mine a little further, another call of 1*l.* per 128th share was ordered.

ROSE-IN-VALE.—A meeting of adventurers was held at Penryn, on Monday last, when the following accounts were submitted, and a call of 4*l.* per share made for liquidating the balance, and for the further prosecution of the mine:—To cost and merchants' bills for Jan. and Feb., including purchase of engine, 663*l.* 8s. 11d.—By balance at last account, 1*l.* 3s. 1d.; call of 2*l.* per share, 264*l.* =265*l.* 3s. 1d.: balance, 398*l.* 5s. 10d.

WEST BASSET.—A meeting of adventurers was held, on Monday last, when the accounts, as follows, were allowed:—To balance due to purser at last account, 412*l.* 18s. 11d.; costs and merchants' bills for Jan. and Feb., 621*l.* 6s. 6d. =1034*l.* 5s. 4d.—By call of 10*l.* per 128th share, 640*l.*; ores sold (less dues), 78*l.* 15s. 7d. =718*l.* 15s. 7d.: leaving balance due to purser, 315*l.* 9s. 9d.

WHEAL VYVYAN-IN-CONSTANTINE.—At a meeting of adventurers, held on the mine, on the 20th ult., the accounts for the six months, ending December 31st, 1846, were examined and allowed, as follows:—By balance at last account, 374*l.* 6s. 2d.; ores sold (less dues), 3676*l.* 4s. 1d.=4050*l.* 10s. 3d.—To dividend of 8*l.* per 1-46th share, in September, 368*l.*; cost and merchants' bills, 3118*l.* 17s.; dividend of 12*l.* per share declared this day, 552*l.*=4038*l.* 17s.: leaving balance in purser's hands of 11*l.* 13s. 3d.

WHEAL BASSET.—A meeting of adventurers took place at the mine on Monday last, when the following accounts were passed:—By balance at last account, 850*l.* 2s. 7d.; ores sold (less dues), 1705*l.* 4s. 4d.= 2555*l.* 6s. 11d.—To costs and merchants' bills for Jan. and Feb., 1965*l.* 1s. 6d.: leaving balance, 590*l.* 5s. 5d.

WHEAL BUCKETTS.—The usual two-monthly meeting of adventurers was held at the account-house, on Tuesday last, when the following accounts were submitted and allowed, and the balance ordered to be divided and collected forthwith:—To balance undivided at last account, 14s. 2d.; costs and merchants' bills for Jan. and Feb., 1179*l.* 12s. 10d. = 1180*l.* 7s.—By ores sold (less dues), 596*l.* 8s. 9d.: leaving balance, 583*l.* 18s. 3d.

WHEAL FRANCO.—At a general meeting of adventurers, held at the Mechanics' Institute, Plymouth, on the 31st ult.,—J. RUNDLE, Esq., in the chair,—the following report from the committee was read:—The great changes that have taken place in the prospects of this mine, and the altered arrangements of its machinery, particularly in the dressing department, which in this mine is, owing to the character of the lode, of more than ordinary importance, the outlay which these alterations have involved, the state of the company's finances, and the improvement in the levels, together with the implied pledge given to the meeting of the 14th of October last, make it at once a pleasure and a duty not only to lay before this meeting the usual statement of the debts, liabilities, and assets of this mine, but to contrast its then—with its present position. On that date, estimating the ores stamped, and old materials to be sold, at 700*l.*, the balance in favour was only 25*l.* 14s. 1d.—while, up to the present time, there is balance due bankers, 915*l.* 8s. 1d.; bills due, 762*l.*; together, 1677*l.* 8s. 1d.—By arrears of calls, 241*l.* 7s.; cash in hand, 47*l.* 5s. 7d.; ores sold, 522*l.* 3s. 2d.; ores dressing, estimated at 1100*l.*=1910*l.* 15s. 9d.—showing balance in favour of the company of 233*l.* 7s. 8d.—To which balance of 233*l.* 7s. 8d. must be added, at the very least, 500*l.*, expended in the alteration of the old, and in the erection of new, machinery—leaving a profit, since the 14th of October last, of not less than 733*l.* 7s. 8d. on the working of the mine; and your committee are happy to add, that by the alterations and erections above referred to, a saving of upwards of 20 per cent. is effected on the whole of the dressing costs of the mine. Before passing from these accounts, to which we shall have occasion to recur, it may be well to state, that care has been taken to include in them, respectively, precisely the same debts and credits.—The report and accounts were adopted, a call of 2*l.* per share was made, and Mr. G. Trickett, jun., was authorised to advertise for public auction a sufficient number of shares belonging to such shareholders as were in arrear—to pay arrears, interest, and cost, including call then made.—The following report from Capt. R. Edwards was read:—The engine-shaft has been sunk to the 47 fm. level, and the cross-cut driven south, towards the lode, about 7 fms.; the ground, when the driving commenced, was hard, but it has much improved since; and, if it continues as it now is, the lode will be cut in the 47 fm. level in less than four months from this time; the engine-shaft is again let to be sunk 15 fms, and this will be commenced as soon as a plat is cut at the 47 fm. level. The 32 fm. level has been driven west from the engine-shaft 29 fms.—the lode, although not rich, shows a great improvement from the 20 fm. level to this place; the 32 fm. level has been driven west from the little cross-course, and south of the former level, about 12 fms. through a tolerably good lode—this looks much in favour of the next level, as the ore ground is not only much longer in the 32 fm. level than it was in the 20 fm. level, but the lode is also of a better quality; the 32 fm. level, driving east of Spry's shaft, is poor; but the lode in the 20 fm. level, above this place, is poor also—therefore, as there is a tolerably good lode, east of this, in the latter level, we hope to have ore soon in the former. The winze, in the bottom of the 20 fm. level, has been sunk about 7 fms. through a large orey lode, but it is now disordered by a cross-course. The level driving west from Spry's shaft, above the 10 fm. level, is in a good orey lode—this is going back in a large piece of untried ground; neither the adit, 10 fm., 20 fm., nor the 32 fm. levels, have been driven through it—the latter has been suspended only a short time, in consequence of insufficient ventilation, but the driving will shortly be resumed. There is also a level being driven west from Vosper's shaft, between the adit and 10 fm. levels (the adit is not driven back through this ground), which is laying open ground that will be taken away on tribute. The pitches, on the whole, are looking much as usual, and I hope our samplings will not fall very far short of 200 tons per month, until the mine be laid open at the next two levels—namely, the 47 fm. and the 62 fm. Within the last six months we have been at an extra expense in buildings, laying out dressing-floors, and adding machinery—this is now nearly completed. It gives us greater facilities in dressing, enabling us to do the work better, and at much less expense. On the whole, the mine is looking well. I believe we shall make profits before the lode is laid open at the 47 fm. and 62 fm. levels; and, judging from what we see in the 32 fm. level, we have strong hopes of the lode being found productive when laid open there, and, if our expectations be realised, we shall then have a good mine.

WHEAL MARY ANN.—A general meeting of adventurers was held at the White Hart Inn, Liskeard, on Wednesday, March 24, when the accounts for December and January were produced—showing balance in favour of mine, 90*l.* 13s. 9d.—examined, and allowed. Among the credits was a sale of lead ores to Messrs. Walker, Parker, and Co.—43 tons 3 cwts. 2 qrs., at 19*l.* 7s. 6d. per ton, producing 836*l.* 7s.—The purser was authorised to nominate a clerk, at 25*s.* monthly.—The following report from Capt. P. Clymo, jun., was read to the meeting:—The 15 fm. level is extended upon the lode, since our last meeting, 17 fms. through a very promising lode, but it has not produced much lead. Barratt's shaft is sunk 6 fms. under the 15 fm. level; here the lode is 3 ft. wide, and is worth 16*l.* per fm.; we are stoping the lode north and south of this shaft, and are raising at present about 15 tons of ore per month. The steam engine is all on the mine, and the engineers are erecting it with all possible dispatch, and we calculate in getting her to work in about a month. We shall then be enabled to prove the lode 100 fms. further south; and from the appearances at the adit level, I have no doubt but that it will prove productive in depth.

NEWLYN.—We are informed, that the Perran Wheal Virgin lode cuts richer as it sinks, and the return at the 16 fm. level, where she is now worked, is very great. The adventurers will receive a handsome dividend in July next. The adjoining mine of Calestick Moors is, we are also informed, equally promising.

WHEAL LOUISA.—We are happy to learn, that great improvements have taken place during the past week at Wheal Louisa mine, in the parish of St. Stephens; and, from its present very cheering prospects, the shareholders have determined to sink the sump with all possible speed.—*Cornwall Gazette.*

LIABILITIES OF ADVENTURERS IN MINES.

SIR,—"An Adventurer," in his letter of March 28, should have stated that all the calls on the mine in question, were made payable *at a bank*, and not to the purser. The late purser may, by a mere error in copying, when sending off accounts of arrears, have stated them as 5*l.*, instead of 7*l.*; or he may have received 2*l.*, and not accounted for it to the company. Should this latter prove to be the fact, the parties who have paid their full calls at the bank, would consider it a hardship to have also to contribute their share of moneys paid by "An Adventurer," and others, to the purser, in opposition to the printed resolution of the adventurers, accompanying every notice of call, directing that such call was to be paid at the bank. Your opinion of the case, as I have stated it, will oblige.—A MINE ACCOUNTANT: *Liskeard, April* 5.

THE POLGOOTH MINE, NEAR ST. AUSTELL.

SIR,—I was very much surprised to see an article in your Journal, of Saturday last, headed "Polgooth Mine," and signed "Thomas Penhall Smith;" for the present, I shall merely state, that no such person ever worked in this mine, nor do I know any one by that name: the article is a most infamous fabrication, without even a shade of truth; and, as a matter of absolute justice, I call upon you to give up the original letter to the gentleman who will deliver you this, that the author may be traced—and I presume that you will not omit giving equal "publicity" to this in your next Journal. THOMAS BELL.

Great Polgooth Mine, April 5.

[We have much pleasure in giving publicity to this prompt denial of the statements contained in the letter we published in last week's Journal. It is quite unusual with us to give up MSS., but we shall be glad to hear that Mr. Bell has succeeded in tracing the letter to its writer, and shall also be happy to publish any counter-statement the parties may think requisite should appear.]

Current Prices of Stocks, Shares, & Metals.

STOCK EXCHANGE, Saturday morning, Eleven o'clock.

Bank Stock, 7 per Cent.,	198	Belgian Bonds, 4½ per Cent.,	96¾
3 per Cent. Reduced Ann.,	85¾	Dutch, 2½ per Cent.,	58¾
3 per Cent. Consols Ann.,	86¾	Brazilian, 5 per Cents.,	84¾
3 per Cent. Annuities,	—	Chilian, 6 per Cents.,	35
3¼ per Cent. Ann.,	87¾	Mexican, 5 per Cents.,	—
Long Annuities,	8¾	Spanish, 6 per Cents.,	21¼
India Stock,	10¾ per Cent., 246¾	Ditto 3 per Cents.,	24¾
3 per Cent. Consols for Acc.,	86¾	Portuguese, 4 per Cents.,	35¾
Exchequer Bills,	1000*l.* 2d., 2 3 dis.	Russian, 5 per Cents.,	34¾
			110¾

MINES.—The amount of business transacted during the week has not been extensive, although in several mines some large transactions have taken place. In Heigneston Down Consols a large number of shares have changed hands, the prospects being of the most satisfactory character.

In consequence of a highly-pleasing report from the mines having been received by the shareholders, buyers have been found at an advance upon last quotation. Treviskey and Barrier, and South Wheal Francis, have changed hands, at an advance. Herodscombe have been also in demand during the week; whilst Herodsfoot is spoken of as improved. Dartmoor Tin Mining Company is stated to be in much favour, and some business has been done at a considerable premium. Callington, Wheal Sisters, Herodscombe, and Stray Parks, are sought after.

The principal business done this week appears to have been in those above enumerated, and Stray Park, Condurrow, Herodscombe, Drake Walls, Wheal Franco, East Tamar, Treleigh, Treviskey and Barrier, and Wheal Arvose.

In the foreign share market, the main transactions have been in the Australian, Balanos, and the North British Australasian Company (Kawaw), but especially in the latter. The pleasing accounts received from the colony since our last, will, in all probability, create a great demand for these, and another company, in connection with this, known as the Scottish, of which we shall speak more in our next.

RAILWAYS.—At the commencement of the week the market was all but deserted—business was at a complete standstill, and only sales of the least importance were made. In the early part of Tuesday, a better business was done, and things appeared to be rallying—but a great depression again took place, from the depreciation in the value of the generality of shares. The latter portion of the week was marked by the same depression, nor is it reasonable to expect the railway share market to stand its ground, when every other description of security is injuriously affected. This general flatness has, doubtless, resulted from the averseness to do business until the decision of the bank directors was known; and having now raised the minimum rate of interest to 5 per cent., a very general depression in the price of commodities may be expected; and, although it is considered no other step could have been taken by the bank in the present state of affairs, it is feared that the restrictions placed on the extension of the paper currency, by the Act of 1847, will prove highly prejudicial.

MEETINGS.—OXFORD, WORCESTER, AND WOLVERHAMPTON: A special meeting at Leeds; to give shareholders an opportunity of expressing their opinions on the late lease to the Great Western; resolutions were passed, concurring in those of the London meeting, and authorising an early meeting in Liverpool.—LONDON, BRIGHTON, AND SOUTH COAST: special meeting; to receive the sanction of the proprietors to the various schemes promoted by the company, and now before Parliament; they were all agreed to, as also the insertion of a clause, empowering the directors to raise 100,000*l.* at any future time for steam-boats between this country and the continent.—SOUTH WALES RAILWAY COMPANY: A special meeting; to approve, or otherwise, of the several bills now before Parliament—the whole would amount to 700,000*l.*; and it was proposed to take shares to the amount of 350,000*l.* in two Irish lines, to keep them alive, as they would be great feeders to the South Wales line—the several proposals were agreed to.—LONDON AND NORTH WESTERN: special meeting; for approval of various bills now before Parliament; there were no less than 30 bills, and they were all approved without a division.—The Edinburgh, Leith, and Granton have confirmed, at a special meeting, the amalgamation with the Edinburgh and Northern.—The Glasgow, Barrhead, and Neilston Direct, at their half-yearly meeting, reported progress, and expressed hopes of being able to open the line before the next meeting.—The Glasgow, Kilmarnock, and Ardrossan reported progress also, and have hopes of opening the whole line in the summer of 1849.—The EAST OF FIFE: half-yearly meeting; agreed to make for the present only eight miles of the line, as far as Largo, and they sanctioned the bill before Parliament for deviation. A dividend of 20*s.* per share has been declared at the ULSTER half-yearly meeting, which also voted donations to hospital, charities, and races, not, however, without protest.

At Messrs. Lamond's sales business was flat, and participated in the usual depression.

HULL, THURSDAY.—We have had more business doing during the past week, but still the number of those who operate is small, compared to those who look on. Prices have been gradually descending. The state of the money market calls loudly for the repeal—or, at all events, the suspension—of the Bank Restriction Act, which will operate, accordingly to appearances, most fearfully by-and-bye. That the bank should be allowed temporarily to extend her issues is an opinion gaining ground daily; and railway shareholders are, perhaps, more than any other class of the community, interested in this matter.

RAILWAY TRAFFIC RETURNS.

From these returns, it will be seen, that the amount of traffic for the last week, on nearly 2730 miles of railway, was 142,791*l.*, thus accounted for:—73,180*l.* for the conveyance of passengers only, 37,583*l.* for the carriage of goods, and a remainder of 32,058*l.* for passengers and goods together, not respectively apportioned; being an increase over the corresponding week of last year of 17,787*l.*, when the mileage was about 1,920.

Name of Railway.	Lgth. Rway.	Present actual cost.	Last Div.	*Traffic Returns.* 1847	1846
Arbroath and Forfar	15	£142,900	3*p.c.*	£166 16 8	£167
Chester and Birkenhead	15	656,293	2½	622 3 10	644
Dublin and Drogheda	25	689,248	3½	673 11 11	628
Dublin and Kingstown	6	349,736	9	973 18 1	857
Dundee and Arbroath	16¾	186,823	6	342 15 10½	290
East Lancashire	28	814,417	—	799 5 9	—
Eastern Counties	184¾	6,513,026	7	10054 8 9	7445
Eastern Union	17	227,253	—	468 0 0	—
Edinburgh and Glasgow	46	2,112,136	6	3305 15 7	2926
Glasgow, Paisley, and Ayr	53	1,867,281	7	2207 14 10	2013
Glasgow, Paisley, & Greenock	23	835,918	2	1002 14 6	906
Great Southern and Western	86¾	1,343,718	—	1163 10 0	—
Great Western	241	9,714,939	8	18255 0 7	17764
Ipswich and Bury	26¾	203,768	—	454 0 0	—
London and North Western	378¾	18,042,004	10	36650 6 7	38372
London and Blackwall	4	1,102,717	1½	912 0 6	716
London, Brighton, & South Coast	112	5,109,667	7	7551 16 0	3826
London and South-Western	127	4,278,789	9	8016 10 0	6149
Manchester & Leeds	117¾	5,036,391	5¾	7610 6 9	7272
Manchester, Sheffield, & Lincolnsh.	49¼	1,678,108	5	3025 11 0	1721
Midland Company	329¾	7,862,274	7	17676 8 2	15612
Newcastle and Berwick	9	1,184,079	5	658 7 10	—
Newcastle and Carlisle	65	1,184,080	5	3092 11 2	1760
Norfolk	70¾	1,199,689	7	2007 3 7	1200
North British	72¾	1,459,958	—	1883 3 8	—
Preston and Wyre	20	439,014	2½	595 14 9	611
Shrewsbury and Chester	15	354,945	—	820 5 6	—
South Devon	20	1,061,283	5	527 10 2	—
South-Eastern	140¼	5,488,411	5¾	7709 17 8	6028
Taff Vale	30¾	888,411	6½	1369 13 6	1063
Ulster	25	356,353	5½	903 0 0	656
York and Newcastle	183¾	1,712,317	9	7985 18 2	6658
York and North Midland	162¾	2,483,986	10	8673 15 8½	4969

PRICES OF MINING SHARES.

BRITISH MINES.

Shares.	Company.	Paid.	Price.
1000	Abergwessin	3	3
512	Albert Consols	¾	2
1024	Alfred Consols	4½	50
235	Andrew and Nangiles	26½	18
10000	Ayrshire Iron Company	2½	2¼
128	Balnoon Consols	25	25
10000	Banwen Iron Co.	2	—
1000	Barristown	4½	30
4000	Bedford	2½	4
128	Besore Lead Mine	14	10
320	Birch Tor Tin Mine	21½	14½
8000	Blaenavon	50	40
100	Botallack	175	225
120	Brewer	5	7
10000	British Iron, New, regis.	10	17½
—	Ditto ditto, scrip	10	19
128	Budnick Consols	52½	40
128	Burthy	20	21
100	Bwlch Cwmerfin	20	—
128	Callestock	17	70
1000	Callington	19	20
256	Caradon Consols	47	8
256	Caradon Copper Mine	9½	1
256	Caradon Mines	22½	30
256	Caradon United	24	15
256	Caradon Wh. Hooper	20	5
1000	Carn Brea	15	110
2048	Carmarthen Consols	3	5
112	Charlestown	200	100
166	Cleveland	3	1½
1900	Combmartin	7½	4½
1000	Comblawn	1½	2
128	Comfort	45	80
256	Condurrow	20	20
2560	Cook's Kitchen	2½	4
1000	Copper Bottom	1	5
1024	Cosheen	4½	20
240	Craddock Moor	15½	15
128	Creeg Braws	120	200
500	Cubert Mine	12	20
2048	Dartmoor Tin	2	3½
7100	Derwent	8½	5
1024	Devon&CourtenayCon.	5½	4
1000	Dhurode	2	5
186	Dolcoath	30	60
10000	Durham County Coal	45	8
256	East Alvenney	3	10
112	East Caradon	40	40
2048	East Crowndale	4½	2½
512	East Combe Silver-Lead	6½	6½
128	East Pool	5	20
100	East Relistian	22	35
9000	East Tamar Consols	1½	2½
—	East Wheal Albert	1	3
94	East Wheal Crofty	280	310
256	East Wheal Fortune	2	3
128	East Wheal Rose	50	1200
—	East of Scotland Iron Co.	1½	2½
123	East Wheal Seton	14	20
256	Exmoor Wh. Eliza	3½	10
512	Fowey Consols	40	45
20000	Galvanised Iron Co.	10	9½
10000	Gen. Mining Co. for Irel.	½	½
2048	Georgia Tin Mines	1½	2½
1000	Godolphin	25	35
256	Gonamena	21	50
128	Goonvrea	4	1
244½	Grambler & St. Aubyn	—	25
100	Great Consols	1000	400
256	Great Callestock Moors	22	26
2560	Great Michell Consols	1½	5
256	Great Resugga Moor	2	4
512	Gt. Wh. Rough Torr Con.	2	25
1500	Great South Tolgus	2	3
100	Grogwinion	5	—
1000	Gunnis Lake	1½	3
256	Gwinear Consols	5	25
1000	Hanson	14	2
1000	Harrowbarrow Old Mine	6½	3
800	Hawkmoor	3	2
6000	Heignston Down Con.	½	3
256	Herodsfoot	14	10½
10000	Hibernian	12½	1
—	Hobb's Hill	4	3
1000	Holmbush	18	14
256	Ivy Tor	1½	2½
827	Kirkcudbrightshire	4½	5
2048	Lamherooe Wh. Maria	9	4½
74	Lanarth & Penstruthal	—	8½
2048	Lanivet Consols	4	2
200	Larkholes	1	3
160	Levant	—	90
1000	Lewis	15	8
1280	Llancynfelin	6	10
1000	Llwyn Malees	5	—
256	Lostwithiel Consols	7	7
128	Ludcott	3	3
4000	Marke Valley	10	2½
5000	Mendip Hills	2	1½
20000	Mining Co. of Ireland	7	8
256	New East Crowndale	3½	3½
128	North Fowey Consols	25	25
100	North Pool	45	130
70	North Roskear	10½	350
512	North Treburget	2	3
100	North United	41	20
256	North Wh. Abraham	½	10
262	North Wh. Leisure	1½	3½
128	North Wh. Providence	2½	7
256	North Wheal Rose	26½	13
15000	Northern Coal Co.	28	2
1200	Old Delabole Slate Co.	25	50
2000	Pantdrainlog Slate Co.	2½	3
128	Par Consols	900	1000
1024	Pembroke	1½	6
256	Penhallow Moor	15	4
4000	Pennant	1	3
100	Penrhiw	30	65
256	Pentuan Wheal Mary	2½	6
128	Pen-y-Cefn Mine	50	85
1280	Perran St. George Un.	13	20
128	Perran Wh. Virgin	9½	90
512	Plymouth Wh. Yeoland	2½	5½-6
2048	Prince Edward	1½	1½
112	Providence Mines	35	45
256	Redruth Consols	3	10
10000	Rhymney Iron	50	30
256	Rose Consols	10	6
1000	Rosewall Hill	1	5
—	Shotts Iron Company	50	70
2500	Silver Valley	4	2½
256	Sourton Consols	3½	3
128	South Caradon	10	400-10
2000	South Dolcoath	9	2
256	Sth. Friendsh. Wh. Ann	14	14
200	South Harvannah	23	25
9000	South Tamar	½	½
256	South Tolgus	2½	20

BRITISH MINES—*continued.*

Shares.	Company.	Paid.	Price.
800	South Towan	10	1½
256	South Trelawney	15½	10
128	South Yeoland	18½	20
128	South Wheal Basset	110	90
124	South Wh. Francis	160	210
256	South Wh. Hope	—	5
1000	South Wh. Maria	2½	2
256	South Wheal Rose	1½	1
10000	Southern&Western, Irish	2	4-5
256	St. Austell Consols	8	14
94	St. Ives Consols	—	230
128	St. Michael Penkivel	5	7
1000	Stray Park	43	80
9600	Tamar Consols	3	5½
1024	Tavy Consols	4	3
6000	Tincroft	7	9
3000	Tin Vale Consols	½	1½
256	Ting Tang	15	12½
128	Tokenbury	140	17½
256	Tolpetherwin	3½	10
256	Trehane	2	22
5000	Treleigh Consols	6	4
256	Trenow Consols	30	25
96	Tresavean	10	200
120	Trethellan	5	35
128	Treviskey and Barrier	130	180
256	Trewollack	20	20
128	Trewellard	12	26½
6000	United Hills	5	1
100	United Mines	300	500
10240	Victoria Tin	1	1
256	Wellington Mines	15	30
128	West Basset	45	28
256	West Caradon	20	168
128	West Cargoll	2	12
512	West Fowey Consols	40	15
256	West Grambler	7	8
—	West Kekewich Consols	—	3
256	West Providence	9½	18
200	West Seton	40	60
—	West of Scotland Iron Co.	155	109
120	West Trethellan	5	25
256	West United Hills	2½	6
256	West Wh. Friendship	7½	4
3845	West Wheal Jewel	11	2½
2560	West Wh. Maria	1½	1
256	West Wheal Shepherd.	5	21
256	West Wheal Tolgus	21½	4
256	West Wheal Treasury	19	—
5200	Wicklow Copper	5	15½
184	Wheal Adams	41	30
1000	Wheal Agar	—	8
256	Wheal Albert	10	8
128	Wheal Acland	13	2
256	Wheal Allen	1½	4
237	Wheal Anderton	16½	32
128	Wheal Ann	—	50½
128	Wheal Arvose	3½	6½
1024	Wheal Ash	2½	12
2560	Wheal Barbara	1½	1½
256	Wheal Benny	6½	4½
256	Wheal Blencowe	8	10
256	Wheal Bucketts	20	32½
256	Wheal Byon Consols	½	½
256	Wheal Calstock	3	4
136	Wheal Clifford	190	190
1024	Wheal Concord	6½	3
128	Wheal Courtenay	—	20
6000	Wheal Curtis	1½	2
256	Wheal Dyke	12	13
512	Wheal Elizabeth	2½	3
256	Wheal Fortescue	5	9½
2048	Wheal Frederick	2	2
384	Wheal France	25	25
256	Wheal Gill	10½	9
1024	Wheal Grace	2	2½
128	Wheal Harriet	45	50
2048	Wheal Holwell	1½	1½
256	Wheal Jane	11	25
256	Wheal Kekewich	4	8
256	Wheal Louisa	6½	10
112	Wheal Margaret	79	200
256	Wheal Maria (Hayle)	19	30
1024	Wheal Maria	1	400
4000	Wheal Martha Consols.	5	1½
256	Wheal Mary Ann	5	60
1024	Wheal Mary (Calstock)	5	1
256	Wheal Mary Consols	34	25
256	Wheal Mary (Lanivet)	6½	4
256	Wheal Maude	1½	1½
128	Wheal Metha	23	92½
128	Wheal Pollard	12½	12
210	Wheal Prospect	4	13
128	Wheal Reeth	1	17
128	Wheal Rose	60	85
99	Wheal Seton	214	800
1024	Wheal Spearne	1½	8
256	Wheal Sisters	27½	30
128	Wheal St. Ann	9	15
260	Wheal Trelawney	7½	124
256	Wh. Tremaine (St. Ervan)	1½	20
256	Wheal Tremayne	35	47½
128	Wheal Trew	20	21
256	Wheal Trevenna	3	4
92	Wheal Tryphena	140	150
128	Wheal Venland	12½	10
127	Wheal Virgin	50	60
256	Wheal Vlow (Perranz.)	½	½
188	Wheal Vyvyan	—	3
1024	Wheal Walter	4	2
256	Wheal Williams	2	18

FOREIGN MINES.

Shares.	Company.	Paid.	Price.
5000	Alten Mining Company	14½	4½
15000	Asturian Mining Co.	9	5½
20000	Australian	2	8½
10000	Anglo-Mexican Co.	100	1
12374	Ditto Subscription	25	2½
3000	Bolanos	150	6½
2000	Ditto Scrip	15	6
12000	Brazilian Imperial	20	2½
10000	Cobre Copper Co.	40	24
8500	Colombian Co. regis.	55	} 4½
5000	Ditto Scrip	5½	}
5000	Copiapo Mining Co.	14	3½
10000	General Mining Ass'n.	20	15½
20051	Mexican Company	59	—
5000	Mocaubas & Cocaes	25	5½
29320	{ Rl. del Monte, regis. / Ditto unregistered }	28½	av. 3½
	Ditto Red Debentures	—	18
	Ditto Black ditto	—	16
	Ditto Loan Notes	150	110
7000	Royal Santiago	10	5
2000	Pachuca Mines	4	4½
11000	St. John del Rey	15	7½
13174	United Mexican	28½	3

SOUTH AUSTRALIAN SHARE MARKET.

Shares.	Company.	Paid.	Price.
2000	Adelaide	5	6
600	Barossa Range	4	25
2464	Burra Burra	5	100
—	Grand Junction	—	28
200	Greenock Creek	5	13
—	Kapunda	—	—
—	Paringa	—	30
—	Poonawurta	—	9½-10
—	Princess Royal	—	259
—	Royal South Australian	—	6½ pm.
600	Victoria	2	2
500	Wakefield	2	2½

SOUTH AUSTRALIA AND NEW ZEALAND.

— North British Australasian (Kaw-aw, &c.) .... 1 .. 1½

*** *We should feel greatly obliged by agents, or others interested, furnishing us with such corrections for our Share List as we may not have received through our usual channels of information—our object being, to present as accurate a list of prices as can be obtained—to procure which, we solicit the aid of correspondents in general.*

JOINT-STOCK BANKS.

Companies.	*Shares.*	*Paid.*	*Price.*
Australasia	22,500	£40	£22
Colonial	20,000	25	15½ ¾
London and Westminster	40,000	20	26½
London Joint-Stock	60,000	10	15½
Provincial of Ireland	20,000	25	44
Union of London	60,000	10	12½

EXPORTATION OF THE PRECIOUS METALS.—The following are the official returns of the exports of gold and silver from the port of London for the last week:—

Gold bars to Hamburgh	1,400	ounces.
Gold coin to Hamburgh	270	„
Ditto to New York	17,500	„
Silver coin to Rotterdam	5,000	„
Ditto to Hamburgh	21,400	„
Ditto to Belgium	3,500	„
Silver bars to Hamburgh	129,360	„

[*Erratum.*—Last week, silver bars to Hamburgh, *for* 37,690 ozs., *read* 49,690 ozs.]

LATEST CURRENT PRICES OF METALS.

LONDON, APRIL 9, 1847.

	£	s.	£	s.	d.
IRON—Bar a. Wales..ton	8	15—	9	0	0
„ London ..	9	17 6—	10	0	0
Nail rods „	0	0—	10	10	0
Hoop(Staf.) „	0	0—	12	0	0
Sheet „ „	0	0—	13	0	0
Bars „ „	11	0—	11	10	0
Welsh cold-blast foundry pig ..	4	10—	5	5	0
Scotch pig b, Clyde	3	10—	3	12	6
Rails, average	9	0—	9	10	0
Russian, CCND c..	0	0—	—		
„ PSI	0	0—	—		
„ Gourieff	0	0—	—		
„ Archangel	0	0—	13	10	0
Swedish d, on the spot	0	0—	11	15	0
„ Steel, fagt.	0	0—	16	10	0
„ „ kegs e	15	0—	15	5	0
COPPER—Tile f	0	0—	97	0	0
Tough cake	0	0—	98	0	0
Best selected	0	0—	101	0	0
COPPER—Ordin. sheets, lb.	0	0—	0	0	11
„ bottoms	0	0—	0	0	12
YELLOW METAL SHEATHING	0	0—	0	0	9½
TIN—Com. blocks g..cwt.	0	0—	4	15	0
„ bars	0	0—	4	19	6
Refined	0	0—	4	18	6
Straits h	4	12—	4	14	0
Banca	4	18—	5	0	0
TIN-PLATES—Ch., IC i, box	1	9—	1	11	0
„ IX	1	15—	1	17	0
Coke, IC	1	6 6	1	7	0
„ IX	1	12 6	1	13	0
LEAD—Sheet k ....ton	0	0—	19	10	0
Pig, refined	0	0—	20	10	0
„ common	0	0—	18	15	0
„ Spanish, in bd.	17	10—	18	0	0
SPELTER—(Cake) l on spot	0	0—	21	0	0
„ „ for arrival	0	0—	20	0	0
ZINC—(Sheet) m export.*	27	0—	28	0	0
QUICKSILVER n ....lb.	0	0—	0	4	6

a Discount 2½ per cent. b Net cash. c Discount 2½ per cent. d Ditto
e In kegs ½ and ¾-inch. f Discount 3 per cent. g Ditto 2½ per cent. h Net cash in bond. i Discount 3 per cent. k Ditto 2½ per cent. l Net cash.
m Discount 1½ per cent. n Discount 1½ per cent. * For home use it is 32l. per ton.

[*From our Correspondent.*]

IRON.—Welsh and Staffordshire are as last quoted. Scotch pig has given way a little this week, and may be quoted at 1s. 6d. to 2s. 6d. per ton lower, with but little doing.
COPPER is firm at quotations, with a fair demand for home consumption.
TIN.—English declined to-day 3s.; Straits and Banca are quiet.
In TIN-PLATES and LEAD, no change to report.
SPELTER has been rather more active this week; several sales having been made at 21l. on the spot, and 20l. for arrival, which rates are confirmed to-day.

MONTHLY REPORT.

[*From a Correspondent.*]

ENGLISH IRON has been in fair demand during the month, at about quoted prices. Of rails about 6000 tons have been sold at a price equivalent to 9l. per ton, at the works in Staffordshire.

SCOTCH PIG-IRON has been in fair demand during the month, at prices varying from 71s. to 74s. per ton, delivered at Glasgow, and within the last few days some extensive sales have been made at 71s. to 71s. 6d. for mixed numbers.

SWEDISH IRON continues firm, owing to the small stock here. Holders are looking for higher prices.

In SWEDISH STEEL there is not much doing, but prices are very firm.

In ENGLISH COPPER another advance has taken place of ½d. per lb. on manufactured, and 5l. per ton on cake and tile. The article is exceedingly firm, and, from the many orders in the market, even a further rise is anticipated.

TIN.—English is in moderate demand at quotations. Several lots of Straits have lately been offered at public auction, and, in some instances, 92s. has been accepted; and it is reported that, after certain sales, as low as 91s. was taken. Banca is nominally quoted 98s.

TIN PLATES.—The demand during the month has been rather flat, and prices may be considered 1s. to 2s. lower.

In ENGLISH and FOREIGN LEAD, we have no alteration to note.

SPELTER.—During the month this article has again declined, both on the spot and for arrival, 20s. per ton. The transactions have been very few, and holders have accepted of 21l. on the spot, and 20l. for spring shipment.

The stock at present is only 1550 tons, against 1850 tons this time last month, and 3960 tons same time last year.

EXPORTS OF METALS TO ALL INDIA FROM LONDON AND LIVERPOOL.

FOR THE FIRST THREE MONTHS OF 1846 AND 1847.

Metals.		1846.	1847.	*In. in* 1847.	*Dec. in* 1847.
Spelter	*Tons*	1477	200	—	1277
Copper		815	1532	717	—
Iron, British		1190	2181	991	—
Ditto, foreign		739	231	—	508
Tin-plates	*Boxes*	1645	789	—	856
Lead	*Tons*	119	360	241	—
Steel		160	263	103	—
Quicksilver	*Bottles*	105	—	—	105

IRONMASTERS' QUARTERLY MEETINGS.

WOLVERHAMPTON, WEDNESDAY.—The commencement of the ironmasters' quarterly meetings was held to-day. It has been previously announced, that, at a meeting, held at Dudley last week, it was resolved that the prices of last week should be adhered to. The meeting to-day was most numerously attended: amongst the great ironmasters and agents present, were—Alderman Copeland, M.P., Mr. P. Williams, Mr. Best, Mr. Thorneycroft, Mr. Barker, Mr. Foster, Mr. Ward, Mr. W. H. Sparrow, Mr. Barrows, Mr. Bradley, Mr. G. Jones, and other influential coal and ironmasters of the district. The trade to-day was declared to be in a healthy condition; but, as is customary, transactions upon a large scale were kept open to be concluded at the Birmingham meeting to-morrow. It was stated, that bar-iron fetched 10l.; hoops, 10l. 10s.; single sheet-iron, 11l. 10s.; and other descriptions, prices in the same proportion. Some apprehensions have been entertained with respect to the condition and conduct of the workpeople. It is perfectly true, that the workpeople have displayed some uneasiness; and, in more than one instance, given notice for advance of wages. The demand is resisted, and the grounds of that resistance ought to be stated. In 1845, in consequence of the then great demand for iron, the wages of ironmen and coalmen were advanced. From that time to the present, although the price of iron has sunk from 12l. to 10l., the same rate of wages has been paid. One proof of the healthiness of the market may be inferred from the fact, that, instead of payments being generally made in bills, as formerly, they were made to-day in cash. One gentleman, an influential member of the corporation of the city of London, who, three months ago, could offer 3000 lbs. of ironstone, to-day could only offer 1200 lbs. Business, to a great extent, is from hand to mouth. To-morrow will be the day at which prices will be confirmed.

BIRMINGHAM, THURSDAY.—The third of the quarterly meetings was held in the Town Hall this day, and was most numerously attended; considering the admitted pressure on the money market, the general transactions were lively, and indicated a healthy state of trade. There was no downward tendency whatever, and considerable orders were taken at the prices agreed at Wolverhampton. For pig, bar, and rod-iron, the demand was brisk, but sheet not much in request. It was stated in the hall, by gentlemen connected with Wales, that the men in that country had foolishly adhered to their resolution of turning out for wages, and that the masters had, in consequence of this folly, commenced blowing out the furnaces. It is not, however, anticipated that such conduct will be followed by the men of this district—but that they will work much less, during the next quarter than they have during the past, is pretty certain; and this, coupled with the smallness of the supply, will have the effect of keeping the prices steady at existing rates, even should there not be any increased demand.

NORTH WALES MINING COMPANY.—The prospectus of this company, the heads of which appeared in the Journal of last week, and to which a reference is made in our advertising columns of to-day, has, we are given to understand, been very generally circulated; and, from the favourable reports given by practical and experienced mining agents, as also the assays made, which accompany the same, the property possessed by the company would appear to hold out good promise of favourable results attendant on the active prosecution of the workings of the several setts already secured. These comprise an extent of upwards of 1000 acres, and are situate in the locality of Dolgelly, in the county of Merioneth, having been partially worked, and ores of considerable produce raised; machinery and the necessary buildings have been erected, but which require extension, as also the underground workings, so as to work the mines effectively. The mines are four in number—viz: the Tyddynyglwadis, Clogan, Vigra, and Dolfrwynog—and are held under lease from the Crown and others, for a term of from 21 to 28 years, at a royalty ranging from 1-10th to 1-12th. The first-named contained silver-lead and copper lodes—the former being, however, deemed the most important, from the quantity of silver contained in the lead ore; and, further, the ascertained existence of gold, which in one assay, we find, produced, in addition to 76 per cent. of lead, with 14½ ozs. of silver to the ton, *no less than* 11 *ozs.* 3 *dwts. of fine gold.* Other assays give 14 and 15½ ozs. of fine gold, with a produce of fine silver in the several samples tried, of 94, 131, 14, 105, 40, 119, and 60 ozs. to the ton of lead. At Clogan and Vigra Mines, which are contiguous to each other, extending over 650 acres, the copper ore assayed produces from 5½ to 24 per cent. of copper, with traces of gold, which we, however, assume is from the lodes containing gossan, and near to surface. Some silver-lead ore from these grants has also been tested, and was found to produce 31 ozs. of silver, but not rich for lead—indeed, we believe the lead lodes have only been partially tried, if at all, beyond proving them at surface. The ore raised from Dolfrwynog Mine has been found to yield from 5 to 20 per cent.; and, from the fact of many thousands having been realised from a deposit in the peat, or bog, immediately adjoining it, little doubt is entertained but that a large deposit of copper exists. We have not space to follow the reports of the several agents, and shall, therefore, close our notice with a brief review of the prospectus under consideration. The mines are proposed to be worked on the Cost-book System, as securing vigilance of management and economy, with perfect security, beyond a certain extent, to the shareholder, the books being open to him, and periodical meetings being held for auditing and passing the accounts. The proximity of the mines to the port of Barmouth, with a navigable river running from the base of the Clogan and Vigra Mountains is a considerable advantage—while the supply of water available for the purpose of working the necessary machinery, and the nature of the country affording facilities to drive in adit levels, to take the lodes at very considerable depths, are held out as peculiar advantages possessed by the property. Ores to a considerable amount, and of high produce, have been sold at Swansea, and there is represented to be a large quantity of ore at the surface, in a partially dressed state. The capital proposed to be raised in the first instance is 31,250l., which it is assumed, with calls at future periods, of like amount in the whole, will be ample for the purposes required. It may be observed, that the prospectus states, a large portion of the purchase-money is contingent upon the success of the undertaking.

THE MAMMOTH ENGINES.—The immense piston-cap for the engine, contracted for by the Perran Foundry Company with the Dutch Government, for draining Haarlem Lake, was cast at Perran on Friday, the 26th ult., weighing nearly 24 tons—being the heaviest piece of casting belonging to the engine. The Perran Foundry Company have now, in course of completion, engines for Staffordshire, Scotland, Holland, Mexico, and Australia.—*Penzance Gazette.*

We understand that Mr. Wyld, the eminent map publisher of Charing-cross, is canvassing the electors of Bodmin, in anticipation of the approaching election.

It is not generally known, that by the 81st section of the Lands Clauses Consolidation Railway Act, it is provided that the expenses of all conveyances of land shall be borne by the promoters of the railway company, and that this includes "all charges and expenses incurred on the part, as well of the seller as of the purchaser, of all conveyances of any such lands, and of any interest therein, and of establishing the title to such lands, and all other reasonable expenses incident to the investigation of such title." By this clause the proprietors of properties are relieved of the whole expense of completing their titles to property purchased by railway companies; and as the numerous railways at present forming are necessarily taking up the properties of many humble small proprietors, on whom the expenses of completing their titles bear very heavy, the information now given may be of service.

QUICKSILVER.—We understand that upwards of 20,000l. worth of quicksilver was lost by the unfortunate wreck of the *Tweed.* It was the property of Messrs. Rothschild, and intended for use in the Mexican mines.

M. Alexandre Brongniart has informed the Paris Academy of Sciences, that M. Renard, of St. Goud, near Etoges (Marne), is now making, with success, experiments in the baking of hard porcelain with the flame of coal-gas, instead of wood.

A fossil cherry-tree was discovered lately in a bed of sandstone, in the Isle of Wight, 200 feet below the surface.

COPPER ORES

Sampled March 24, and Sold at Andrew's Hotel, Redruth, April 8, 1847.

Mines.	*Tons.*	*Price.*	*Mines.*	*Tons.*	*Price.*
Carn Brea	100	£6 10 6	Wh. Tremayne	47	£4 19 6
ditto	96	7 11 0	ditto	34	0 4 0
ditto	95	8 11 0	ditto	32	2 3 0
ditto	86	6 4 6	ditto	25	8 12 6
ditto	82	12 17 6	Wh. Rodney	64	4 15 0
ditto	70	11 9 6	ditto	51	3 14 0
ditto	68	4 2 0	Wh. Virgin	97	4 12 6
ditto	55	11 2 0	ditto	11	2 9 6
ditto	54	5 11 0	West Wh. Treasury	48	6 6 0
ditto	30	2 0 6	ditto	29	2 6 6
Par Consols	100	10 8 6	North Wh. Basset	48	5 18 6
ditto	71	5 3 0	Trenow Consols	37	5 19 6
ditto	70	5 8 6	Carn Perran	16	4 4 6
United Hills	120	3 16 6	ditto	11	8 10 6
ditto	53	3 5 6	Wh. Jane	27	3 5 0
Wh. Sparrow	41	3 18 6	Wellington Mines	26	7 4 6
ditto	14	5 0 0	North W. Abraham	20	3 8 0
Wh. Prosper	65	2 10 6	Wh. Ruby	19	10 7 0
ditto	56	4 3 6	Lewis Mines	13	8 9 0
ditto	54	8 2 6	Wh. Caroline	9	3 3 0
ditto	49	4 12 6	Wh. Kayle	6	2 10 6
			Rose-in-Vale Cons.	6	5 0 6

TOTAL PRODUCE.

Carn Brea	738	£5848 10 0	Trenow Consols	37	£219 4 6
Par Consols	241	1787 18 0	Carn Perran	27	161 7 6
United Hills } Wh. Sparrow }	228	863 10 0	Wh. Jane	27	87 15 0
			Wellington Mines	26	187 17 0
Wh. Prosper	224	1063 6 0	North Wh. Abraham	20	68 0 0
Wh. Tremayne	138	831 1 0	Wh. Ruby	19	196 13 0
Wh. Rodney	115	493 19 6	Lewis Mines	13	109 17 0
Wh. Virgin	108	475 17 0	Wh. Caroline	9	28 7 0
West Wh. Treasury	77	321 16 6	Wh. Kayle	6	15 3 0
North Wh. Basset	48	284 8 0	Rose-in-Vale Consols	6	30 3 0

Average Standard .... £112 11 0 | Average Produce .... 8.
Average Price per ton £6 5 0
Quantity of Ore .... 2107 tons. | Quantity of Fine Copper, 167 tons 13 cwts.
Amount of Money £13,074 13 0
LAST SALE.—Average Standard .... £114 7 0.—Average Produce .... 7¾.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal	164	£994 10 0
English Copper	632	3498 6 3
Vivian and Sons	298	2329 5 6
Freeman and Co.	195	1080 1 6
Grenfell and Sons	330	1807 11 3
Crown Copper Company	41	120 10 0
Sims, Willyams, and Co.	269	1457 13 6
Williams, Foster, and Co.	178	1786 15 0
Total tons	2107	£13,074 13 0

NO SALE on Thursday next, April 15.

Copper ores for sale on Thursday week, at Andrew's Hotel, Redruth.—Mines and Parcels.—Devon Great Consols, Wheal Maria, Wheal Fanny, and Wheal Josiah 1036—West Caradon 366—Fowey Consols 312—Wheal Friendship 250—Tresavean 243—West Wheal Jewel 165—Marke Valley 125—Bedford United Mines 120—Wheal Brewer 104—Holmbush 84—West Trethellan 76—Charlestown United Mines 58—Wheal Busy 46—East Relistian 25—Wheal Gorland 14—Hallenbeagle 7—Penstruthal 4.—Total, 303 5 tons.

COPPER ORES

Sampled March 17, and Sold at Swansea, April 7, 1847.

Mines.	Tons.	Prod.	Stand.	Price.	Mines.	Tons.	Prod.	Stand.	Price.
Knockmahon	105	8½	107	£6 9 0	Chili	46	49	86½	£40 2 6
ditto	75	6	117	4 15 6	ditto	44	48½	87½	40 2 6
ditto	70	9½	105½	8 2 6	ditto	28	48½	91½	42 0 0
ditto	67	9½	106½	8 5 6	Zew Zealand	72	14½	98½	12 2 0
ditto	62	6½	116½	5 0 6	Burra Burra	71	18	98½	15 10 6
ditto	40	6½	115½	5 2 0	Kapunda	66	27½	95	23 12 6
ditto	17	8½	106½	7 1 6	Ballymurtagh	36	3½	133½	2 15 0
Berehaven	119	9½	105½	8 1 0	Lackamore	20	9½	108	7 12 0
ditto	113	9½	104½	7 14 0	ditto	8	24½	94½	20 14 6
ditto	99	8½	108½	7 7 6	Montacute	19	23½	96	20 2 0
ditto	97	9½	107	7 15 6	Aberdovey	17	12½	101½	10 16 6
Chili	48	49½	88½	41 2 6	ditto	2	6½	112	5 9 0

TOTAL PRODUCE.

Knockmahon	436	£2794 7 6	Kapunda	66	£1559 5 0
Berehaven	428	3312 7 0	Ballymurtagh	36	99 0 0
Chili	166	6761 5 0	Lackamore	28	317 16 0
New Zealand	72	871 4 0	Montacute	19	381 18 0
Burra Burra	71	1102 5 6	Aberdovey	19	194 18 6

Total tons, 1341.—Total amount, £17,394 6s. 6d.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
English Copper Company	138	£5585 5 0
Freeman and Co.	71	1102 5 6
P. Grenfell and Sons	125	1930 3 6
Sims, Willyams, and Co.	138	2430 9 0
Vivian and Sons	316	2013 5 0
Williams, Foster, and Co.	553	4332 18 6
Total tons	1341	£17,394 6 6

Copper Ores for Sale April 29.—Cobre 107, ditto 98, ditto 81, ditto 58, ditto 111, ditto 106, ditto 101, ditto 59—Chili 95, ditto 90, ditto 69, ditto 53, ditto 52, ditto 46, ditto 50, ditto 49, ditto 48, ditto 41, ditto 40—Cuba 110, ditto 101, ditto 96, ditto 62, ditto 56, ditto 110—Santiago 95, ditto 78, ditto 70, ditto 58, ditto 52, ditto 48, ditto 47—Berehaven 117, ditto 109, ditto 95, ditto 94—Knockmahon 113, ditto 84—Burra Burra 66, ditto 61, ditto 3—Ballymurtagh 37, ditto 15, ditto 2—Holyford 33—New Zealand 32—Canadian 1.—Total, 3199 tons.

LEAD ORES

Sold, at Holywell, on the 8th of April, 1847.

Mines.	*Tons.*	*Price.*	*Amount.*	*Purchasers.*
Kirkcudbrightshire	23	£11 7 6	£261 12 6	Walker and Co.
ditto	7	6 6 0	44 2 0	Newton and Co.

Total tons, 30.—Amount of money, 305l. 14s. 6d.

COAL MARKET, LONDON.

PRICE OF COALS PER TON AT THE CLOSE OF THE MARKET.

MONDAY.—Buddle's West Hartley 16 6—Charlotte Main 15—Chester Main 15 9—Davison's West Hartley 16 6—Dipton Tanfield 14 6—Framwellgate 16 6—Grace's Hartley 14 6—Hasting's Hartley 16 6—Holywell Main 15 6—Nelson's West Hartley 16 6—New Primrose 15—North Percy Hartley 16 6—North Wylam 15—Ord's Redheugh 14 9—South Derwent Hartley 14 6—Tanfield Moor 16 9—Twizel Main 15—Wylam 15—Eden Main 17 9—Cowpen Hartley 16 6—Derwentwater Hartley 16 6—Wall's End Bewicke and Co. 17 to 17 3—Burnhope 16—Gosforth 17—Hotspur 16—Hebburn 16—Hedworth 15—Hilda 16—Hedley's Beamish 15—Riddell's 17—South Peareth 15 6—Wharncliffe 17 3—Belmont 17 9—Braddyll's Hetton 18 6—Bell 18—East Hetton 16 9—Haswell 19 6 to 19 9—Hetton 19 3—Keepier 18—Lambton 18 9—Russell's Hetton 18 9—Richmond 17 9—Shotton 18 6—Stewart's 19 3—Whitwell 17 6—Hartlepool 19 3—Hudson's Hartlepool 18—High Thornley 16 9—Heugh Hall 17 3—Kelloe 18 6—Thornley 17 9—Adelaide 18 9—Barrett 17—Cowndon Tees 17—Denison 16 6—Gordon 15—Richardson's Tees 16—Seymour Tees 18—South Durham 16 9—Tees 19.—Ships at market, 228; sold 167; unsold, 61.

WEDNESDAY.—Adair's Main 14—Buddle's West Hartley 16 6—Carr's Hartley 16 9—Chester Main 15 6—Holywell Main 15 6—North Percy Hartley 16—North Wylam 14 6—Original Tanfield 14 3—Ord's Redheugh 14 9—Twizel Main 15—Wylam 15—Wall's End Hedley's Beamish 14 6—Eden Main 17 9—Belmont 17 9—Braddyll's Hetton 18 9—East Hetton 16 9—Haswell 19 3 to 19 6—Hetton 19—Lambton 18 6—Russell's Hetton 18 6—Shotton 18 3—Stewart's 19 3—Hartlepool 19 3—High Thornley 16 3—Kelloe 18 6—Thornley 17 9—Gordon 15—Tees 19—Blaengwaur 24—Cowpen Hartley 16 9—Derwentwater Hartley 16—Howard's West Hartley Netherton 16 6.—Ships at market, 111.

FRIDAY.—Adair's Main 14 3—Dean's Primrose 15 3—Dipton Tanfield 14 9—Holywell Main 15 6—New Tanfield 15—North Percy Hartley 16—Ord's Redheugh 14 9—Tanfield Moor 16 9—Wylam 15—Wall's End Brown's 14 9—Harton 16 3—Hedworth 14 6—Killingworth 16 9—Braddyll's Hetton 18 6—Haswell 19 6—Hetton 19—Lambton 18 6—Russell's Hetton 18 6—Richmond 17 6—Stewart's 19—Caradoc 18 6—Cowndon Hartley Steam 14—Cowndon Tees 16 9—Tees 19—West Hetton 16 9—Anthracite 22 6—Derwentwater Hartley 16—Howard's West Hartley Netherton 16 6—Ships at market, 91.

NOTICES TO CORRESPONDENTS.

It will at all times save much trouble, and frequently considerable delay, if communications are simply directed— To the Editor,

Mining Journal Office,

26, Fleet-street, London.

Also, to avoid trouble, Post-Office Orders should always be made payable to William Salmon Mansell, as acting for the proprietors.

"C. B." (Plympton).—We shall feel obliged for all the particulars you can furnish; also for the necessary information for our share list.

"A Young Miner" (Pembrokeshire).—We are not, at present, in possession of further particulars than those already published, but shall take the earliest opportunity of giving detailed information.

Paris.—We shall feel obliged by the paper referred to being transmitted us.

*** We have been compelled to postpone the continuation of the series of papers on the "Silver and Gold Mines of the New World;" also, communications from Mr. Henry Johnson, Mr. William Storey, "Alpha," &c. &c.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, APRIL 10, 1847.

In making up our quarterly returns of the sales of copper ores in Cornwall, it has invariably been the rule to make them *up to* the quarter-day, but not *inclusive*—and this plan has also been observed by the compilers of the Ticketing Paper. In the returns, which will be found in last week's Journal, we pursued our usual course; but, on receiving the Ticketing Paper, on Saturday, we found the sale of March 25th was included—thereby making an apparent deficiency in our returns of 1896 tons, and 28,346*l.* 17s., as compared with the Ticketing Paper. As we think it desirable that the two publications should agree, we now give the amounts for the quarter, to the 25th March inclusive, which are 38,071 tons of ore, and in money 222,542*l.* 9s.—showing an increase over the previous quarter of 2992 tons, and 31,345*l.* We noticed last week the improvement which had taken place in the standard and price, which is also affected by the addition of one ticketing. The average standard for the quarter has been 106*l.* 1s., on a produce of 8½, and price 5*l.* 17s. against 101*l.* 13s. in the previous quarter, on the same average produce, and price 5*l.* 9s. The ores were purchased by the following smelting companies—viz.:

Companies.	*Tons.*	*Amount.*
Mines Royal	2604	£17,003 18 5
English Copper Company	5572	30,846 13 6
Vivian and Sons	7787	40,867 4 10
Freeman and Co.	4518	26,441 18 11
Grenfell and Sons	5296	31,931 10 8
Crown Copper Company	156	941 7 2
Sims, Willyams, and Co.	4356	23,641 15 3
Williams, Foster, and Co.	7782	50,868 5 3
Total	*Tons* 38071	£222,542 9 0

Our figures in the returns of the Swansea sales also require alteration, and the following table will be found a correct list of the amount sold from the Foreign and Irish Mines for the quarter, to the 25th March inclusive:—

PRODUCE OF THE PRINCIPAL FOREIGN AND IRISH MINES,

SOLD AT SWANSEA IN THE QUARTER ENDED MARCH 25, 1847.

FOREIGN.	*Tons.*	*Amount.*
Chili	1462	£36,751 8 0
Cobre	2526	31,568 8 6
Burra Burra	714	13,157 2 6
Cuba	826	10,052 1 6
Kapunda	498	9,389 11 0
Santiago	333	5,596 16 6
Recompensa	407	1,596 13 0
Montaente	36	648 0 0
Princess Royal	10	225 10 0
Paringa	8	108 8 0
Total foreign	6820	£109,093 19 0
IRISH.		
Knockmahon	1669	£10,647 12 0
Berehaven	1172	9,353 15 6
Holyford	61	1,339 7 6
Ballymurtagh	48	178 16 0
Tigrony	49	157 16 0
Total Irish	2999	£21,677 7 0
Making together a total of	*Tons* 9819	£130,771 6 0

The interest which was excited on the first discovery of mineral wealth in South Australia, so far from being diminished, is increasing—large quantities of ores are daily being raised from the first-opened mines, and new localities are continually being fixed upon as sites for mining operations. From the vast quantities of rich ores, with which a very large portion of South Australia abounds, she is rapidly advancing in amount of population, industry, and wealth; and should at any future time coal be discovered, to enable the ores to be smelted on the spot, it will give another impetus to enterprise—and, most probably, instead of exporting her copper ores to England, she will be ready to supply the eastern world with the pure metal. It is stated, in the *South Australian Gazette*, that the gold lode has been cut in the Victoria Mine, richer and more promising than ever, and measures have been adopted to extend the operations, by the issue of 250 new shares at par to the scripholders. It is stated, in the *Adelaide Observer*, that "a person, named Alex. M'Geary, who has spent months in exploring the country, with a view to the discovery of coal, has at length found the black carboniferous superstratum, which is a sure indication of the existence of coal below." Now, we must confess our ignorance of what this "black carboniferous superstratum" is; for in other countries coal is looked for, not by any "black" indications at surface (except just at the outcrop), but by the nature of the strata—viz.: above the old red sandstone and mountain limestone, and beneath the new red and the magnesian limestone. There may, however, exist coal in other parts of the globe in different situations to these; and we shall congratulate the colonists on their good fortune, should this discovery of M'Geary's prove as valuable as it is stated it *must be* in the *Adelaide Observer*. The *South Australian Gazette* goes, we think, a *leetle* too far on this subject; for, in his sanguine hopes of the existence of coal, the editor introduces a description of a coal strata at Bilston, in Staffordshire, where it lies 150 ft. from surface, and where the first "black shale" indications are 120 ft. beneath clay and new red sandstone; and assumes it to be not *improbable*, that M'Geary's "black" discovery will be found identical with it: for the sake of the colonists, we hope it may. While on the subject of the wealth of this flourishing colony, we would just call attention to the report of the first annual meeting of the Barossa Range Mining Company in another column; and although the directors had received no dispatches, by which they could give some information of the progress being made, there is no doubt this undertaking will be one added to the successful mining speculations in the colony. We have had an opportunity of inspecting some of the ore, which is exceedingly rich, and consists of the red and grey oxides and yellow sulphurets. Arrivals are, however, daily expected, when another meeting will be called, and when we hope to give some important information respecting their progress.

In another column will be found an article on the question of smelting the ores in New Holland, which subject is now being seriously entertained by parties interested in the mining wealth of South Australia.

In another column will be found a report of the quarterly meeting of the Trelleigh Consolidated Mining Company—at which, a dividend was declared of 6s. per share, or 5 per cent. on the subscribed capital. It will be remembered, that at the last meeting it appeared to be the general wish of the proprietors (though not of the directors), that a small dividend should then have been paid, proportionate to the balance in hand, which would not have amounted to more than 2s. or 2s. 6d. per share. We then remarked on the impolicy of declaring so small a dividend, when, in all probability, in three months, they would be able to pay one of much larger amount; and the directors (very wisely, we think,) having communicated with some of the largest shareholders, determined to await the result of the next three months' working—the consequence is, that sufficient profit has been realised to justify the payment of a respectable dividend—more than double that before proposed, set aside 150*l.* to a reserve fund, and leave a balance in hand for current outlay of between 400*l.* and 500*l.* It must be highly gratifying, that the expectations held out have been realised, and there appears every reason for well-grounded hope, that this mine will now pay regular dividends.

On reference to the remarks of our Paris Correspondent, it will be observed, that some expectations are entertained of the Minister having at length determined to concede to the just popular demand; and, in spite of the wailings and threatenings of the iron monopolists, reduce, if not wholly abolish, the unjust and impolitic high protective duties on iron, which have so long been an incubus on the industry of France, crushed all enterprise with regard to the merchant marine, and benefitted only a few bloated capitalists, to the direst injury of the community at large. At present, this remark must only be taken from rumour, as, although there is no doubt something is on the *tapis*, no details have transpired. We hope, before our next publication, to receive a translation of the Customs' Bill, presented to the Chambers by the Minister of Finance, when we shall offer some further remarks on this important subject.

We have before this alluded to the proposed plan of resuming the working of the tin mines in Devonshire, and expressed our firm belief of the importance of the sett that has been recently taken up by the Dartmoor Consols Tin Mining Company. We are glad that our opinion, though even then backed by that of some of the most practical mining captains, has been strengthened and corroborated by the report of Capt. Paull, inserted in another column, and which, we think, deserves the perusal, not only of those who are interested in mining affairs, but of all our readers, on account of its clear and lucid style. We cannot, however, avoid giving an extract or so, from this most interesting document, of those parts, which the more particularly bear out our former view. The first extract is:—"I shall first direct your attention to the fact, that the tin raised in this sett is of a superior quality to that of any other mine in Devon, except Batchelor's Hall, being the best grain tin—the market value of which is full 15*l.* per ton more than that of common tin." By this you will perceive that, if an average quantity only of tin was raised, it would be a most productive mine; but when Mr. Paull states his opinion of the workings in the manner he does in our next extract, the value of the mine must be considered as incalculable. We subjoin his own words:—"I have no doubt (says Mr. Paull) the spirited proprietors will have a handsome return for their outlay, provided tin remains at its present price, and the works are managed in an economical and judicious manner—it being, from various circumstances, *much less a speculation than most other mining concerns.*" We need add no further opinion of our own after this testimony, but that we trust that the great success this company has already met with, will induce others to take up setts in the same district—the supply of tin, in consequence of its continued and increasing requirement, being quite insufficient for the demand, in addition to the extensive foreign orders we are now constantly receiving from the continent and colonies, but, more particularly, France.

We have given, in another column, the specification of Mr. Crampton's patent locomotive steam-engine for railways, illustrated with a diagram, by which the difference from the usual plan of the common locomotive will be very readily seen. This engine is called the *Namur*, and is one of two ordered for the Namur and Liege Railway. It is a six-wheel engine, with the whole of the working parts outside. The diameter of the driving-wheel is 7 ft.; supporting wheels, 3 ft. 9 in.; distance between centres of extreme wheels, 13 ft.; diameter of cylinder, 16 in.; length of stroke, 20 in.; number of tubes, 182; length of ditto, 11 ft.; diameter of ditto, outside, 2 in.; length of fire-box, 4 ft. 3 in.; breadth of ditto, 3 ft. 5 in.; area of fire-grate, 14 ft. 6 in.; surface in fire-box, 62 ft.; surfaces of tubes inside, 927 ft.—total heating surface, 989 ft. The following are the advantages which Mr. Crampton professed to obtain before his engine was completed, and in which, from the experiments since made, he appears to have been completely successful—viz.: the rocking and vibrating action to be reduced by lowering its centre of gravity, and by confining nearly the whole weight between the supports; the centre of gravity not being influenced by the size of the driving-wheel, the advantages resulting from large wheels are, consequently, secured; four, six, or eight wheels may be used—the working arrangements remaining the same. From the superior or low position of the boiler, facilities are given for increasing the heating surface to an extent of at least 2000 ft., and the centre of gravity not injuriously affected thereby, whatever the size of the driving-wheel—that the arrangement of the machinery is such that the driver can at all times see it at work; and the repairs and cleaning can be more easily done in consequence of the men not having to get under the engine for that purpose—that the driving-wheel being behind the fire-box is in the best place to secure adhesion and steadiness—that the foregoing improvements can be obtained without necessarily altering the proportion found to give the best effect in ordinary engines—consequently, every engineer can carry out his own proportion of parts, still keeping the principle of the machine. This engine has been completed six or seven weeks, has run a distance of 2300 miles, and in no instance has any vital part been disarranged; and only in one instance had they occasion to stop, which was in consequence of a pump-joint giving way. Out of these 2300 miles, 1700 were run on the London and North Western line, with express, mail, first, second, and third-class, and coke and goods trains—and, in every case but one, they arrived at the stations before time, varying from two to eleven minutes: with a train of coke, weighing 80 tons, exclusive of engine and tender, a speed was reached on a level of 51 miles per hour; with 50 tons, 62 miles per hour; and with nothing but engine and tender—the most severe test a locomotive can be put to—75 miles per hour. There is much importance to be attached to the position of the machinery; superintendents will not crawl under a dirty engine to see that the men finish their work properly, either in cleaning or repairs; but, where he can walk round an engine, and see all without trouble, the men cannot, if so disposed, neglect their work without being discovered. The complete absence of all vibratory motion is acknowleged by every scientific person who has seen the working of the engine, and it is equally steady whether it is travelling at the rate of 20 or 75 miles per hour—in short, the arrangements of Mr. Crampton's locomotive engine will form a new era in the history of railway mechanism; and, as being superior in speed and safety, will, doubtless, be adopted by most companies as new engines are required.

Muntz's Yellow Metal.—We understand the Admiralty are about affording G. F. Muntz, Esq., M.P. for Birmingham, an opportunity of testing the efficacy of his patent metal for sheathing ships. It is said H. M.'s ship, the *Champion*, now at Portsmouth, is to be appropriated for the trial.

We learn from Spain, that the works of Sierra Almagrera and Murcia produced, from the month of January, 3549 marks and 4 ozs. of refined silver.

Copper mines have been discovered in the island of Masseera, on the Arabian coast of the Red Sea.

Iron, Hardware, and Metal Trades' Pension Society.—It will be seen by our advertising columns, in the present and last week's publications, that the fourth anniversary festival of the Iron, Hardware, and Metal Trades' Pension Society, will take place at the London Tavern, on Wednesday next, the 14th inst.—the Lord Mayor in the chair. We congratulate the friends of this excellent institution on the powerful patronage acquired under his lordship's auspices, as apparent from the influential list of noblemen and gentlemen whose names are given as stewards; and we trust the results of their advocacy and efforts will go far to achieve for this society a prominent place among the benevolent institutions of our country, befitting the wealth, the numbers, and the importance of the trades and interests represented by the society. From the report read at the annual general meeting on the 29th March, we learn, with much pleasure, that an addition of 40 new members has followed the adoption of the new principle of the society, by which its benefits are rendered accessible to all deserving necessitous members of the trades, whether subscribers or not. This truly liberal feature of its constitution cannot fail to secure a still greater accession to the number of its supporters as it becomes better known; and the election of three additional pensioners about to take place will, we trust, tend not to diminish, but to augment, the funds of the society. The total amount of donations made up to the close of 1846 is 1331*l.* 10s., and the list of annual subscribers shows an income from that source of 268*l.* 16s. We look forward to the approaching festival, in the full confidence that it will prove a "bumper," add materially to the funds of the society, and be the means of largely increasing its numbers of patrons and subscribers.

Coal and Iron in India.—As it has now been determined on by the East India Company, and supported by Government, that the railway system shall be extended to India, and a guarantee given for a dividend on the capital invested, any information respecting the localities from which supplies of fuel can be drawn, must prove interesting, and not less so the capabilities, for the manufacture of iron. Hitherto the iron mines of India—though yielding iron in no respect inferior to the famous mines of Dannemora—have been scarcely opened, from the deficiency of the means of transport; and the coal-fields, though of great richness and extent, have lain neglected, principally from the same cause. The coal-fields of India are largely distributed over its surface; coal has been traced from Burdwan to the westward, across the valley of Palamow, through the district of Sohagpore to Jubulpore, the neighbourhood of Sak, and the Towa River, in Nerbudda—420 miles from Burdwan. In the same parallel of latitude it is found in the province of Cutch, and is extended across the centre of India, to the north-east extremity of Assam, forming a zone, which stretches from 69° to 93° east longitude, and from 20° to 25° north latitude. There are also two situations were coal has been found distinct from this extensive and well-defined belt—Hurdwar and Attock—the first near the source of the Ganges; the latter, near that of the Indus. The Nerbudda river extends 700 miles along the very centre of the above zone; and coal in three situations has already been found on its banks. The Burdwan coal-field is of immense importance; the collieries at present opened are situate 140 miles from Calcutta, and the district is traversed by two rivers—the Damooda and the Adjii; the face of the country is undulating, presenting a difference of level between the heights and valleys of about 60 ft. The surface is composed of a yellow clay, supporting a good soil—both slightly calcareous; this clay rests on a grey sandstone, which effervesces with acids, 7 ft. in thickness; and where exposed to the air, in many places an efflorescence of soda is found upon it. Beneath this rock, an inferior coal is found, accompanied by shale, containing the impression of plants, bending over the low hills, and descending deep beneath the valleys; beneath these, good coals are found: and this portion of the deposit has been traced in a south-west direction 11 or 12 miles, and in a north-west line for seven miles—thus forming a curve. At a depth of about 50 ft., two beds of excellent coal occur—one, 8 ft., and the other 9 ft. in thickness; below these, 13 beds of sandstone and shales occur; and the greatest depth reached is 88 ft., where the excavation is terminated by a hard grey sandstone. The whole district abounds in rich and valuable iron ores of various kinds; and it has been proved, by the erection of temporary furnaces at Sheargur, that immense quantities of iron can be made at little expense. The average of the ores produce 50 per cent. of iron. A prospectus, drawn up in 1828, pointing out the benefits likely to arise from establishing iron-works in India, led to the formation of the Porto Novo Works, near Madras, now in successful operation; and, as the subject is one of immense importance to the construction of railroads in India, we shall, in a future Number, give the substance of a report by Capt. Campbell, which will, doubtless, throw much light on the present position of the coal and iron districts.

Tredegar Iron-Works.—The Tredegar Old Mill, the engine of which was erected by Boulton and Watt, in the year 1806, steam cylinder 36 in., with seven heating furnaces, rolled and finished 566 tons of rails, and also rolled 289 tons puddle bars—total 855 tons; commenced rolling 1 o'clock Monday a.m., finished 11 o'clock Saturday evening. It is questionable whether there are many pieces of machinery of such limited power, having been in constant work for so long a period as nearly 41 years, could accomplish a task of this description.

North British Australasian Company.—We have received from Aberdeen some particulars relative to the present position and prospects of this undertaking, which, however, are principally confirmatory of the statements which appeared in our Journal a few weeks ago. We now learn that, in July last, the mining captain estimated the value of the ore then on the surface at the mine at Kawaw, at 20,000*l.* Advices of a much more recent date have been received at Aberdeen within the last 10 days, that 1000 tons of rich copper ore, and fine wool to the value of 5000*l.*, had been shipped, and were on their way to this country; and it was expected, at the time the letter was written, that they would be able to ship a similar quantity in a month or two from that time. The mine, as it proceeded, presented every indication of becoming an extraordinary and productive one, and the quality of the ore is found to be rich, whilst a considerable quantity of pure copper is sometimes raised. Arrangements have been made for smelting the ore in the colony, and the furnaces are to be constructed on the most approved principles, as at present adopted at Swansea, which will effect a great saving in freight, &c., whilst it will enable the company to bring home the poorer portions of the ore, which it would otherwise be unprofitable to do.

A deposit of coal is stated to have been found at Port Natal.

Water-Power of Europe.—A curious communication has been addressed to the Paris Academy of Sciences, from M. Daubrée, containing a calculation of the quantity of heat annually applied to the evaporation of the water on the surface of the globe, and of the dynamic force of the streams of continents He finds that the evaporation employs a quantity of heat about equal to one-third of what is received from the sun; or, in other words, equal to melting of a bed of ice of nearly 35 feet in thickness, if spread over the globe. The motive force of the streams in Europe is, according to M. Daubrée, equal to between 273,508,970 and 364,678,620 horses, working incessantly during the whole period of the year.

A Miner's Riches.—Another extraordinary example of the productiveness of the Peruvian Mines, is found at San Jose, in the department of Huancavelica. The owner of the mines of San Jose, requested the viceroy Castro, whose friend he was, to become godfather to his first child. The viceroy consented, but at the time fixed for the christening, some important affair of state prevented him from quitting the capital, and he sent the vice-queen to officiate as his proxy. To render honour to his illustrious guest, the owner of the San Jose Mines laid down a triple row of silver bars along the whole way (and it was no very short distance), from his house to the church. Over this silver pavement the vice-queen accompanied the infant to the church, where it was baptised. On her return, her munificent host presented to her the whole of the silver road, in token of his gratitude for the honour she had conferred on him. Since that time, the mines and the province in which they are situated, have borne the name of Castrovireyna.—*Travels in Peru.*

Caledonian Railway—Edinburgh Branch.—The works of this portion of the Caledonian Railway are now in a very advanced state, and the most vigorous exertions are making to have it opened along with the other parts of the line about the end of next autumn. In this neighbourhood the work is progressing at a rapid rate. In the large field in Lothian-road, at the rear of the West Church Charity Workhouse, excavations are making for the foundation of the terminus, which is to be an elegant, commodious, and substantial structure, from a design by Mr. Tite, the eminent architect. The foundation stone is to be laid by the General Lodge of Scotland, with the usual masonic honours, on Wednesday the 7th of April, and the mason work is to be proceeded with immediately. The directors have it in contemplation to purchase the West Church Charity Workhouse, and we learn that they are at present in treaty with the parochial board for that purpose; so that, if this is accomplished, they will have the means of greatly augmenting their goods accommodation, and at the same time of bringing the station closer to Princes-street, which will be of considerable advantage as regards the passenger traffic.—*Scotsman.*

Original Correspondence.

HYPOTHESES ON IRON.

SIR,—The experiments of Mr. Mitchell cast no new light upon the subject of iron-making, as far as I am concerned; and, with every desire to do justice to that gentleman's chemical knowledge and abilities, I must still remark, that he has merely confirmed my previous statements, respecting the deoxidation of various earths in the blast-furnace. As the deoxidation which thus takes place, though stoutly denied by the irrascible and *complimentary* "Ferreus," is, in reality, the key to every radical improvement which may hereafter be effected in the manufacture of pig-iron, and in its subseqaent conversion into bar-iron, without the intervention of the crude and wasteful processes of refining and puddling: I am naturally anxious to claim a precedence in this matter, as a subject with which I have been long familiar.

It is now nearly 12 months since I was in treaty with an eminent firm in South Wales, for the purpose of effecting the cure of a strong red-short tendency in their bar-iron, owing to the predominance of an alloy of one of the metallic bases, named by Mr. Mitchell, with the pig-iron; but which defect had ceased to be an evil of importance, in consequence of their iron being chiefly manufactured into railway bars, where brittleness in the iron, when heated, was more than counterbalanced by its greater strength and inflexibility when cold.

By the adoption of suitable fluxes in the blast-furnace, pig-iron of any required quality may be obtained; and to this point I have, in a former communication, directed the attention of the incredulous "Ferreus." The fluxes which are eligible for this purpose are oxides of the metallic bases, calcium, aluminum, barium, and magnesium, as far as I have experienced; and strontium is now added by Mr. Mitchell. What its effect may be upon the pig-iron, I cannot say; but those of the other four bases I have repeatedly investigated and ascertained. In the hearth of the blast-furnace, mutual deoxidation takes place between the melted fluxes, or oxides, of metallic bases; and alloys of these bases with the cast-iron are formed, conferring upon the latter the innumerable shades of quality observable in that product. Thus, an alloy of barium stamps the pig-iron with a character of strength and great density—whilst the resulting bar-iron possesses great pliability, strength, and ductility. Calcium confers great strength and pliability upon both pig-iron and bar-iron, when *cold* especially; and yet, at a certain temperature, they exhibit excessive brittleness. Aluminum is the most pernicious of these alloys, unless it is counteracted by other alloyed bases. Magnesium, in alloy with cast-iron, renders the latter brittle and porous, or rather, open in the grain; but the iron possesses great fluidity, so as to be well adapted for fine castings. Ores which contain magnesia, should be smelted with fluxes containing barium or calcium, if a strong quality of pig-iron is desired. Other metallic oxides, when smelted with oxide of iron, produce, as fluxes, many remarkable qualities in the iron obtained; and the extreme of ductility is insured, by using oxide of manganese as a flux. The superiority of charcoal and peat-iron is owing to an alloy of potassium and calcium with the iron, and to the almost entire absence of aluminum.

As a general rule, Mr. Mitchell will find calcium and aluminum in every species of the cast-iron of commerce—the amount of each varying in each sample of iron examined from that previously examined. The nature of the materials used in the manufacture of iron is so varied, and the oxidised bases combined with the oxide of iron are so numerous, that I do not expect much light will ever be thrown upon this subject by analysis, which can only produce results from each specimen examined, differing in their proportions for each analysis made. I have as little doubt of the existence of peroxide of calcium as of that of peroxide of iron; and but for the peroxidation of lime in the blast-furnace, it would be impossible to obtain from aluminous ores of iron, pig-iron of any value in commerce. "Scrutator's" hypothesis of the production of grey cast-iron, through the agency of cyanogen, cannot be established as a necessary law; for the most perfect grey cast-iron can readily be produced in a common crucible, when every particle of atmospheric air, and, therefore, of nitrogen, is carefully excluded.—R. MUSHET: *Coleford, April* 8.

HYPOTHESES ON IRON.

SIR,—Will you be so kind as to correct an error or two in my last communication. For "the reason of its appearing *less* in practice," read "the reason of its appearing *more* in practice;" and, for "chloride of *silica*," read "chloride of *silicon*." I may also add to my theory of the manner in which carbon is burnt off from grey and white iron, that in the latter case, not only are there two chemical forces called at once into action, but the carbon from the latter is in the aptest of all states to combine with oxygen—that is to say, it is liberated from the iron with which it was previously combined in the *nascent* state, and all bodies in that state are more prone to enter into combination than when in any other. This position receives every day proofs in the routine of laboratory operations. I hope, in a very short time, to fully prove the truth of the above hypothesis, and am at present engaged in some experiments for that purpose; when finished, I will lay the results before your readers.—J. MITCHELL.
Hawley-road, Kentish Town, April 6.

HYPOTHESES ON IRON.

SIR,—It is highly satisfactory, that Mr. John Mitchell has ascertained the existence of the metallic bases in alloy with iron. It has been supposed the qualities of iron were influenced by these alloys; that coke pig-iron differed from charcoal iron, made at a lower heat by a greater quantity of them; and that certain differences in hot-blast iron had their source in alloys at a still higher temperature. Lime, for instance, has been thought to effect the red-short, either by direct alloy of the metal, or by neutralising the silicic acid present. The point of my objection was to masses of lime, clay, &c., forming a decarbonating medium in the puddling furnace and blast furnace, by their oxygen, and leaving these basic earths metallised. On referring to the *Mining Journal*, of November, it will be found that Mr. R. Mushet advanced, to account for an extraordinary theory of free oxygen in the blast furnace, that these earths are there metallised bodily, and that the slag, or cinder, contains them in a revived state. I cannot agree to this without sufficient proof, and have stated reasons why it is more probable that a hyperoxidation is enforced on the cinder. I have experiments, which indicate, at least, an increase of weight. So in the puddling furnace, if that deoxidation takes place, which really is effected with ferruginous oxides, it may be proved, by introducing different quantities of earth, and analysing the bar-iron, to discover if it contains the alloy of metal in the same shades of proportion. Mr. Mitchell's remarks prove the justice of my quotation—"*Projecit ampullas et sesqui pedalia verba.*" Mr. R. Mushet seems to possess a kaleidoscope of composition, wherein are put fiction and fact, names of substances from a chemical dictionary, and ideas a little disfigured, taken from the *Mining Journal* about a fortnight old—by a twist of the instrument something novel in combination is produced, whether or not it be science. The next interesting point for Mr. Mitchell will be, to ascertain whether the alloys exist in the ore, or are formed during reduction. I did not deny generally the existence of chemical carburets of iron; but exactly what Mr. Mitchell states, that we have no evidence, that the gradations of iron in manufacture are such. If it be undoubtedly ascertained, that grey iron contains less carbon than white, it will throw a light on the manufacture, which must be used for further research, to account for apparent contradictions. For instance, if white iron be a maximum compound, and grey iron contain the carbon, diminished a certain proportion, we find, on the other side, steel-grained iron containing the same amount in diminution, which is assumed in grey iron. We have here two substances, of the most opposite qualities, produced by the same cause; and to say it is merely the state, chemical or mechanical, of the union that makes the difference, will not satisfy all the conditions. It seems necessary to assume, that there must be a change in the state or composition of the carbon itself. If the graphite be pure carbon, the enlarged volume in white iron should be a compound of carbon. The first chemists have differed on the elements, or simplicity, of carbon in its usual state. Some have thought it an oxide—others have thought the diamond the oxide; while Biot, from its intense refracting power, and the quantity of oxygen absorbed while burning, held it was a compound, with one-fourth of hydrogen. I cannot, at this moment, recollect the exact results at which Messrs. Allen and Pepys, in their experiments on its combustion, arrived; but I believe its re-solution in sulphuric acid to a black powder is held a true oxidation. Nothing is more certain than that, if chemical agents indicate a less proportion of carbon in grey iron than white, *yet* the *presence* of a greater quantity of carbon is necessary to produce grey iron, and *more* carbon is absorbed in producing it. I do not know any analogy (though there may be), which shows that two substances, chemically combined, being brought into the presence of a greater quantity of one of them, the chemical union is destroyed, and converted to a mechanical mixture, containing a *smaller quantity* of that which has been increased. Thus, if to sulphuret of iron you add sulphur, you do not destroy the chemical sulphuret, and convert it to a loose mixture of iron, with a *smaller proportion* of sulphur. But this is exactly the statement as respects iron and carbon. If definite weights of bar-iron be fused with varying weights of carbon, the results pass, as the carbon increases, through all the shades of steel, up to white iron, and the presence of *more* carbon is *absolutely necessary* before grey iron can be formed, and the greyness increases *directly* with the quantity of carbon. Now, if these presumptive proofs of *quantity* producing grey iron be overthrown, the only explanation must be in a change of *quality*, and that change will appear to be produced by exposing, at high temperatures, *more* than a certain amount of carbon, together with iron—an investigation which must throw new lights upon both bodies. The memorable controversy on chlorine, and indeed all history of chemical systems, convince us that not always what *seems, is*. Graphite, as far as I am aware, is not known to be formed without contact of iron; and it remains to be discovered, if heating together white iron and carbon produce grey iron and graphite, how the carbon passes off that which the iron loses in the transition. It is not *fusion* only which can produce the change; for if white iron be imbedded in charcoal, it is converted, by high heat, to grey cast-iron *without fusion*. So also steel, in the cementing furnace, absorbs carbon in no limited proportions, but *gradually*, and the heat prolonged after the high blistered point passes it up to white, and then to grey iron, without fusion. And if grey pig-iron be fused in contact with either natural or artificial oxides of iron, in the puddling furnace, it yields up its carbon, and revives those oxides with more effect than white iron, though it is assumed to contain carbon, which is *less* oxidisable and less in quantity. It is true, the facility for oxidation, arising from a chemical union, as stated by Mr. Mitchell, may *partly* explain this, by supposing the carbon in the white iron is *destructively* oxidised, before it can effect a deoxidating contact, effected by the less perishable graphite. This may also throw light on the process of the refinery, by supposing in it the carbon is rather made *oxidisable* than *expelled*. But still, when we reflect what an affinity carbon does possess for oxygen, this reasoning can hardly be thought sufficiently simple. The knot to be untied, assuming the facts proven of Messrs. Karsten and Mitchell, is, how in the furnace, or in the crucible, is the carbon formed, or transformed, to the inoxidisable graphite? And it is very difficult to conceive how the operation of the puddling-furnace consists, instead of a gradual yielding up of portions of carbon to the atmosphere throughout the whole mass, in effecting the entire destitution of it in some particles of carburet, while other particles are left in possession of their full equivalent—by which means alone, according to the theory, the relative quantities of carburet of iron and iron can be changed. There is evidently something deeper to be fathomed. The presence of phosphorus, I am aware, has been asserted, as well as denied, by the first chemists. When we consider the pervading presence of this substance and its compounds, nothing is more probable than its existence in iron. It has been said to be present in larger quantities in Swedish iron than in ours; and here, as in all connected with the manufacture, is an enormous field for analysis. The presence of phosphorus may be evidence of the absence of sulphur; we do not know positively the effects of the former, but nothing is more strongly established than the ill effects of the latter. I have hitherto been more disposed to assign the inferiority of pit coal iron to the formation of sulphurets than to the alloys of metals. Although the sulphur of pit coal must undoubtedly have had its source in the albumen of the original wood, yet it is probable, in using wood, either raw or charred, a great portion of sulphur escapes in a gaseous form, which is fixed during subterranean fermentation into sulphurets with the earthy bases; or the plants, which formed our coal-field, may have been originally more albuminous than our present trees. No analyses of coal ashes would afford greater interest than a comparison with the salts of present vegetation. Experiments by Mr. Mushet, sen., have appeared, to show that the phosphates have anything but a degrading tendency in fusion with iron; while sulphurets have the worst. The greater fusibility of coke-iron over Swedish bar-iron, and charcoal-iron generally, may spring from alloys of these; and to make complete Mr. Mitchell's magnificent cycle of investigation, it should be ascertained what *woods* prevail in each mark of foreign iron for the use of manufacture. Oak, we know, contains the least, and beech the most, of phosphoric salts; while varieties of the pine, and especially its bark, yield them in large proportions: what more useful, or interesting, than to trace these effects through the resulting products of iron?—FERREUS: *April* 6.

MANUFACTURE OF IRON.

SIR,—If "Scrutator" desires to work his blast-furnace totally free from slips and prejudicial irregularities, I would refer him to the plan of filling, described by me on the 2d of January. I established its use in my own furnace after some months of prejudicial and malicious opposition, and the results far exceeded even my expectation; it was a direct application of the principles explained in Mr. Gibbons's admirable treatise on the *Construction of the Staffordshire Blast Furnace*. Steam has been tried in the blast furnace. "Scrutator," by a little inquiry, might obtain information, which he much wants on this and other topics. Is he not the man of originality who proposed to carry on his back the gas out of coal mines?
Gloucester, April 5. ——— DAVID MUSHET, Jun.

MR. HEATH'S PATENT STEEL.

SIR,—I am, indeed, gratified to see the opinion of the Chancellor and Vice-Chancellor on the decision of the Court of Exchequer in this case, and that the patentee has now another opportunity of obtaining justice The decree against him was, perhaps, the most cruel that has taken effect, under the patent law, and quite destructive of the principle of encouragement for patent inventions. It is manifest *in equity* that the right to an entirely new principle ought not to be affected by any application of it, whether designed or accidental; and the decision here of all the judges, that because a man, in the first instance, infringed a patent by *chance*, he must continue to do so *by intention*, seems monstrous in the extreme. The time is very short, which the law devotes to exclusive benefit, scarce sufficient to complete the first idea, and, assuredly, for that period the *principle* should belong to the original inventor. When there is a new and ingenious application (nothing of which existed on Mr. Heath's infringement; but, on the contrary, the defendant is expressly permitted to enjoy the benefit of his encroachment, *because he had no merit or skill in performing it*), this might be so far reserved for a distinct patent, that the second patentee should be the licentiate of the first, and pay him for the use of the *principle*, while he enjoys his own ingenuity of *application*. The parent ought not to be destroyed by its offspring—thus, in the electric telegraph, the fruits of the protracted labours of Messrs. Cooke and Wheatstone, will, probably, be annihilated by the application of Messrs. Nott and Gamble, though the last is indebted to the first for its existence, and justice might be done to both. It is true, by custom, that in invention hitherto, one sows and another reaps; but this ought not to be, and we wish to find science not transfixed by *points* of law, but expanded in *spaces* of equity.
Gloucester, April 6. ——— DAVID MUSHET, Jun.

BRUNTON'S ORE-DRESSING FRAME.

SIR,—In reply to the "Inquirer" in your last week's Journal, I beg leave to state, that the improvements of the frames at Wheal Vor did not escape the vigilant attention of Capt. Joseph Vivian, of the Cook's Kitchen Mine, who, prior to his adopting my frame, had carefully erected eight frames, with all the improvements referred to; and it was by the operation of these improved frames, that my patent frames were tested and compared, as recorded in your Journal:—

DEAR SIR,—In reply to yours of yesterday—your patent frames, working on this mine, are saving to us in labour 20 per cent., and in tin about 5 per cent.—JOSEPH VIVIAN.
Cook's Kitchen, March 11.

I thank the unknown "Inquirer," for thus bringing out a circumstance which I had overlooked.—W. BRUNTON, Jun.: *Pool, Redruth, April* 5.

IMPROVEMENTS IN ARTIFICIAL LIGHT.

SIR,—I am glad to see in your columns the specification of a patent under the above title—inasmuch as I can testify, from my own private use, to the great utility of the glasses prepared in the manner described by the inventor, Mr. Burleigh. Every shade of blue, green, and yellow tints, difficult to be distinguished by ordinary artificial light, are to be as clearly and plainly pointed out as in broad daylight. I think that the gas glasses in question only need to be known, to have an immense sale.
Hawley-road, Kentish Town, April 6. J. MITCHELL.

ON HEAT AND COMBUSTION—GWENDRAETH IRON-WORKS.

SIR,—Upon former occasions, some time ago, I used to take up some space in the columns of your valuable Journal, with my speculations upon heat and combustion, more particularly as connected with a patent I had an interest in. I trust the explanations I am about to give, will prove a sufficient apology for returning at this time to the subject. The consideration of combustion, with its desired result, heat, and economy of fuel, must be always interesting. Many of your present readers would not see the Journal at the time to which I refer—it is now many years since, and the older readers may not call to remembrance the principles I used to advocate; I will, therefore, briefly recapitulate them, remarking here that, from my own experience, which has since been very extensive, and the sanction of some of the highest authorities in the kingdom, everything has tended to confirm their correctness. In the ordinary mode of effecting combustion, nearly one-half of fuel is consumed without effect. Combustion ought to be divided into two classes—one fixed or local; the other, gaseous or diffused. In the former, heat is produced by the combustion of the solid part of fuel, or carbon; and it affects bodies only in actual contact, or very close proximity. The uses of this class of combustion and heat are limited—being confined for the most part to smelting or remelting metals in furnaces and cupolas. In the latter class, heat is the result of the combustion of gas, either previously existing in the fuel, or the result of the combustion of the solid part. In combustion, carbon and oxygen unite in two separate proportions, forming either carbonic acid or carbonic oxide. The latter is a combustible gas, and requires as much more oxygen to convert it into carbonic acid as the carbon took up to form carbonic oxide. As the acid, carbon is fully saturated with oxygen, and in that case the greatest production of heat has been attained. Bituminous coal contains gas (carburetted hydrogen) and tar. Smoke and soot are these, having very fine minute particles of carbon in combination, which escape combustion for want of a supply of oxygen to consume them, and is so much waste of the most valuable part of the fuel. This is sufficiently apparent, and, at the same time, justly complained of as a great nuisance; but in the use of fuel, containing no volatile matter in the form of gas and tar—as charcoal, coke, or anthracite coal—although there may be no visible sign of any waste of fuel, still, passing off as carbonic oxide, one-half of the fuel is wasted for want of a second supply of oxygen. For a perfect result, both classes of combustion require to be separately supplied with their full proportion of oxygen, or fresh air. Upon the application of air to the gaseous part of fuel, many able and admirably-written articles have appeared in the *Mining Journal*, more particularly from your talented correspondent, Mr. Charles Wye Williams. Combustion, to produce gaseous or diffused heat, is of most general use, and comprises many of the most important applications of fuel. When combustion depends solely upon the draught of a chimney, it is next to impossible to supply the gaseous products with their full supply of air; because, while the fire opposes resistance to the free passage of the air, if another aperture without resistance be opened for it, the bulk will rush in that way, and the active combustion of the solid part of the fuel in the fire will fall off, rendering the whole inefficient. The use of a blast is the only means of effecting perfect and total combustion; the use of a blast is impracticable with common fire-grates—they are quickly destroyed. Some years ago, I ascertained that large quantities of anthracite coal, of very pure quality, some containing 92 or 93 per cent. of carbon, existed in the counties of Carmarthen and Glamorgan. I then conceived the idea, that the application of steam to this coal, when fully ignited, would produce all the effects of bituminous coal; that it would prove very valuable for the purposes of steam navigation, more especially for long voyages, since it might be regarded as concentrated fuel; and I contrived a grate, which is the subject of the patent, to which I have alluded above. In order that the elements of water may combine with carbon, it is necessary that the carbon be kept in a very active state of combustion, and in the form of anthracite coal—more particularly, I found the use of a blast necessary to effect this. To enable me to use a blast, and, at the same time, to apply the heat of the grate-bar to the generation of steam, so that the steam should pass with the blast through the highly-ignited carbon, I contrived the grate in question. Under these circumstances, both the elements of water, oxygen, and hydrogen, combine with the ignited carbon, and produce the two combustible gases—carbonic oxide and carburetted hydrogen. These passing off from the fire, and meeting with sufficient oxygen, or fresh air, to consume them, occasion gaseous or diffused heat in proportion to the rapidity with which the action is carried on; and this may be regulated to the greatest nicety by increasing or diminishing the blast, which is easily effected by means of valves. I had an interview with Dr. Faraday, at the Royal Institution, some years since, for the purpose of explaining to him these opinions, in which he fully concurred. He seemed at that time to take a great interest in the subject, and put several questions to me. He asked if I considered that we gained heat by the application of water? I answered, no; but that I considered we altered the effect of the heat; that, instead of all the heat being in the fire itself, we diffused it over a wide space. He was curious about the appearance of the flame we produced; I described it as a thin, transparent flame, of a greenish-yellow colour, when he remarked, "I have no doubt a much hotter flame than a more luminous flame." It is now a long time since I considered all my speculations upon these matters were fully and satisfactorily determined, with one exception. I recollect one which I hazarded; but I have not my papers by me now to refer to the exact terms which I used. The purport was, that the oxygen and hydrogen of the water would at some point reunite into water, and deposit their carbon. At the time I stated this, I made the remark, that "such an idea would appear too fanciful for the generality of your readers." I have just had an opportunity of determining the correctness of this—the last and only remaining point of speculation. These grates were applied to the stoves for heating the blast-pipes at the Gwendraeth Iron-Works—were kept in use two or three weeks, and then discontinued. The pipes were found coated with a fine black substance, like soot. Every point of uncertainty, which might be regarded as mere theory, or speculation, being now determined, the time has arrived for me to stand forward, and expose the attempts of designing and interested parties, to set aside a valuable invention. I have hitherto been too supine; I am obliged to throw off all delicacy, which, in the present case, I certainly regret; but the case is one which calls for the fullest explanation. A lame, or half explanation, will not be sufficient to satisfy the public, that there was not some insurmountable objection to the use of the grate for heating blast-pipes. Perhaps, I might not have come forward thus so immediately, had I not seen, at the same time, something very much like preparatory movements for removing the grates from the boilers. I took great pains to introduce and recommend a young Irishman, at that time a surveyor of the turnpikes of the district, as a periodical mineral surveyor. He soon contrived to ingratiate himself so much into favour with the principals, as to get himself appointed chief manager. Having gained an ascendency over the minds of these gentlemen, it became necessary, in order that he should retain this, to remove from the works all parties possessing more knowledge than he did himself, and any one likely to have any influence. His first efforts were directed against me. I was removed from the immediate locality, and then quickly every one holding any situation of trust, or authority, was discharged without notice, their places being filled by creatures of his own. Although holding no situation in the works, I thought it right to go occasionally to see that the patent fires were properly attended to; and this, although very unpalatable, could not, with a good grace, be objected to. The patent grates must be condemned as the only means of effectually excluding me from intercourse with the proprietors of the works. The effect of the fires upon the blast-pipes was most excellent, and unexceptionable in every respect. The proprietor, chief manager, furnace manager, and engineer, all expressed themselves satisfied; but a sort of foreman, under the furnace manager, set himself against them, and succeeded in getting them removed. I can never believe that this man would act, and succeed, without the sanction of, and a knowledge that it would be acceptable to, the highest authority. I have gone round in the dark unobserved, and found every valve from the blast shut off. This had been done with the view of keeping the pipes so cold, that when the proprietor came round in the morning, he might show him that the blast would not melt lead. I have been told by parties, not employed on the works, that this man has declared he would have those fires done away with, even if he had to take his knife to cut the straps of the fan—that the boiler fires were next to be condemned, is quite clear. One of the engineers, who took a great interest in them, paid much attention to them, and did his best to forward my views, has been removed from the charge of the engine. Arrangements are being made to set a very large additional boiler. With the patent grates, the boilers in use would be sufficient for the work; without these, more boilers will certainly be required. Before the introduction of the

patent grates, to work the blast-engine for two furnaces, from 14 to 15 tons of coal were used daily; now, the same work is done with from three to four tons of culm. Here is a case for the serious consideration of inventors. A valuable invention is to be condemned, in order that an Irish adventurer, deficient in knowledge and experience, may secure some 300*l.* per annum, for the next seven years. I trust you will not regard this merely as a private case—but, to promote the objects of science, and for the sake of justice, you will give this a place. I have abundance of evidence to support *what I have advanced*, and I know you will afford the others the space and opportunity to refute what I have advanced, if they can.

Llandebie, near Llandilo, April 5 T. H. LEIGHTON.

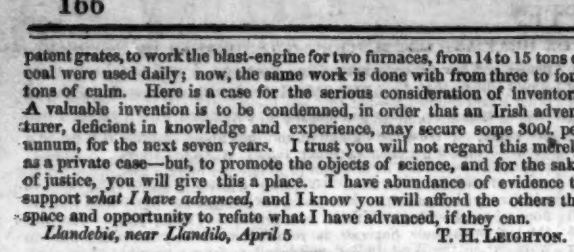
BIRAM'S OBLIQUE PADDLE-WHEEL—STEAM-BOILER EXPLOSIONS.

SIR,—I have read with much interest the article in your paper of the 20th inst. on this subject, and have also seen the prior description in the *Mechanics' Magazine*; but the engravings in that work are so indistinct, that I cannot make them out clearly. I should wish, were it not inconveniencing your correspondent, to inquire, how he proposes connecting the two shafts at their inner ends, so as to work smoothly, and without additional friction; and, likewise, his arrangement of engines for driving those shafts? Mr. Jacob Perkins, on the 2d of July, 1829, patented a plan, which seems somewhat similar to that of your correspondent. In his specification, he states his plan to consist as follows:—The paddle-shafts are placed as nearly as may be in a horizontal plane; and are so inclined towards each other, and towards a perpendicular plane passing through the keel of the vessel, that, if produced backwards, they would meet in such perpendicular plane, and form with it an angle of 45°, and with each other an angle of 90°, pointing towards the stem of the vessel. The shafts, or axles, being so inclined, pass obliquely forwards through the sides of the vessel; and the wheels, being fixed with their planes at right angles to the shafts, look obliquely forwards. The floats, or paddles, of the wheels, must be so set, or fixed, as that each of them shall stand at an angle of about 45° to the plane of the wheel's motion, to the end and intent, that each float, when at its point of greatest immersion, shall make a right angle with the keel of the vessel; the floats, or paddles, are fixed in the nave of the wheel, and radiate from its centre. I am not aware of this plan having been carried into practice by the patentee. In the 22d number of the *Scientific American*, there is an account of an improved paddle-wheel by a Mr. Smith; his object is to make the floats enter the water edgeways, then close and open again on the floats rising from the water. A similar plan—namely: the causing of each half of the float to turn on a spindle—was patented in this country by the sons of Symington, the father of steam navigation, on the 23d of June, 1834. In their invention, the floats of the wheel, which open at their centre, enter the water edgeways, close before coming to the point of greatest immersion, and open before quitting the water—the floats being acted upon by levers at the inner end of their axles, which levers have rollers working at their outer ends in eccentrics round the paddle-shaft. Our trans-Atlantic inventor intends accomplishing the same thing by spiral springs on the spindle, which keep the floats in a position to enter the water edgeways; and then, through the float, axles being out of the centre, the pressure of the water will close the floats. This invention is of the true *go-a-head* school; for the inventor has never discovered that his wheel, for the purpose of going astern, is perfectly useless—the same action which operates in closing the float board, when going a-head, opening them when going astern. He will also discover, on putting his invention into operation, that the concussion of the ends of the floats against the outer arms of the wheel, will soon render his wheel useless.

In the same Number of your Journal, in which Mr. Biram's oblique paddle is described, is a communication from "E. G." on Steam-Boiler Explosions. He seems to have overlooked the simple fact, that no boilers ever explode "*when the boilers happen to go dry*:" the cause of explosion being generally attributed to the pumping of water into such boilers when in that state; which water, coming in contact with the red-hot iron, is generated into steam more rapidly than any safety-valve, or valves, can provide against, and then, not unfrequently, a rupture in the boiler has taken place. The only safe plan, when any of the boiler-plates has become heated, is for the attendant to draw the fires, and allow the plates to cool—the boiler will then seldom be found to have sustained any serious injury; but, on the other hand, if water be forced into the boiler when in such a state, should no explosion ensue, the form of the plates will alter, being pressed inwards by the pressure of steam in the boiler; the deposits from the water will accumulate in the cavity thus produced, and the plates be rapidly burnt.—X. Y. Z.: *Battersea, April 6.*

MINE SURVEYING.

SIR,—"Investigator," in place of setting "A. B.'s" question at rest, as one would suppose from his letter, is as widely apart from the true answer as any of your correspondents; at least, of the first question. It tells little for the practical knowledge of mine surveying, that so many futile attempts should be made to answer such a simple question—in order to set it at rest, I forward the accompanying solution, worked in full, which you will please insert in your next, and upon its correctness "A. B." may rely with certainty. Let A represent the mouth of the level, and B the extent to which it is driven upon the given bearing,—the following solution by the



sines, although not strictly applicable, inasmuch as the question is properly cognizable by the tangents, will show how the angle of 7° 31′ 10″ is obtained, and that angle *plus* 7°, the given bearing = 14° 31′ 10″ south of east, the required bearing:—

$$\sqrt{(272{\cdot}72^2 + 36^2)} = 275{\cdot}06$$

	As 275·06 =	2·439428
	Rad. =	10·000000
	36 =	1·556303
	7° 31′ 10″ =	9·116875
And by tangents:—	As 272·72 =	2·435716
	36 =	1·556303
	Rad. =	10·000000
	7° 31′ 10″ =	9·120587

In the seconds, the natural sine of the given angle 1°, multiplied into the length, will give the required variation, as follows:—

Nat. sine 1° = ·0174524

0174524 + 1760 = 30 yds. 2 ft. $1\frac{34}{35}$ in.

Mr. Budge's answer was incorrect, in consequence of that gentleman having made a mistake in 6 links in copying from the Journal; otherwise there is not the slightest doubt but his solution would have been all that would have been required.—F. B.: *April 6.*

VENTILATION OF MINES.

SIR,—I will endeavour to satisfy "X." (of Carlisle), by explaining how I would arrange a fire at surface on the top of an upcast colliery pit, in connection with a tall chimney. The fire-grate should be so arranged, that none of the surrounding atmosphere at surface should pass through it, and the communication from the shaft should lead the current from the pit through the fire-door and ash-pit—the whole of which should be inclosed with a chamber of brick or stone, with a door opposite the fire-door, to allow a man to enter to attend the fire; when in operation, the fire-door must be kept open, and the outer door shut; and the result will be a very great additional power of draft, as the chimney, above the surface, will be kept up to a very high temperature, which cannot be the case when a fire is kept only at the bottom of a very deep pit. "Alpha's" plan of placing his pits on a new colliery, coincides with my views, if he intends his pit at C to be the engine-pit, to drain the water by. Will "Alpha" be kind enough to say, how he will work his colliery, arrange his horse-ways, air-ways, &c.? Controversy in these matters can avail but little; but practical men, giving a sketch of their views, will generally prove of great service to all connected with mining. Mr. Richardson's wheel, at Coombe Valley Slate Quarry, is the most economical way of working water-wheels. I saw one at work at Old Park, Shropshire, 55 years ago. There are two at work on the same principle at Blaenavon—one, 31 ft.; the other, 40 ft. in diameter—they have done good service for many years, and are still doing it; there are two others on the shifting gear principle, but the former are far superior.—T. DEAKIN: *Blaenavon, April 6.*

MINE VENTILATION.

SIR,—A gentleman from Cornwall, of some mining experience (Mr. Bath), connected with our smelting works, has suggested to me, whether the electric spark could not be made available to fire the carburetted hydrogen (or fire-damp, as it is called,) of the coal mines, during the absence of the men. It appears that there is no night-work, and he considers that the foul gas could be fired off, or the air tested, by the usual wire arrangements of the galvanic battery, every night and morning, during the absence of the men.—J. M.: *London, April 2.*

SMELTING ORES IN AUSTRALIA.

A meeting was held on Monday last, on the smelting question, and more especially for the purpose of taking into consideration some advices recently received from Van Diemen's Land, relative to the advantages possessed by Schonter Island, for the establishment of smelting-works. This island lies off the eastern coast of Van Diemen's Land, to the northward of Port Arthur, is little exposed to the weather, and abounds with coal, which is said to be of quality similar to the Welsh coals. It was represented that coal can there be supplied to the furnace at 2*s.* per ton; that convict labour could be obtained at a cost of from 6*d.* to 1*s.* per day; that the freight would be about 1*l.* per ton, or, if cargo were sent both ways, by sending ore to the island, and bringing coal to Port Adelaide, it was estimated that it could be done as low as 10*s.* per ton.

The first view of the subject would lead to the almost irresistable conclusion, that Schonter Island must become the Swansea of Australia; or, at least, that by smelting a portion of ores in that place, we shall be enabled to obtain fuel in return cargo, at so low a rate as greatly to enhance the economy of operating here upon the other more tractable portions. Before, however, acting upon this suggestion, which would necessarily involve the maintenance of two establishments, and thus, to a certain extent, a double expense, to say nothing of the questionable economy which is usually consequent on similar works carried on in different places on a small scale, it would be well to look more closely into the question. The first remark which suggests itself refers to the data upon which the proposition is founded. Taking for granted the sufficiency and convenience of the harbour, the quality of the coal, and the price at which it can be supplied, and confining ourselves at present to the labour question, and considering the peculiar nature of the work to be done, it is perfectly clear that the idea of obtaining even convict labour for such a purpose as smelting at 1*s.* per day per man, will prove on trial altogether delusive. A man working over a furnace, although a convict, could not be maintained upon such a scale of diet as might suffice for the shepherd, the farm servant, or the quarryman. The operations to be performed will require, for the most part, not only a superior degree of intelligence, which perhaps may be found among convicts as readily as elsewhere, but also a degree of carefulness and attention, and even of zeal in the success of what is going forward, all which we fear cannot be commanded in the class of persons proposed to be employed. Powerful inducements, in the shape of pardons or other indulgences, may be held out; but, in the interim, the expense of labour will be found to cost at least double or treble the estimated sum, with the exception of those to whom the mere mechanical part of the work is entrusted.

Assuming, however, the entire correctness of the estimates of fuel, labour, and freights as they are given, the apparent saving upon establishing two smelting-works—the one in this colony, and the other in Schonter Island (for on no other supposition would there be any saving, after paying for the freight of the ore)—would amount to about 2*l.* 16*s.* per ton of metal, over and above the saving to be effected by smelting it here, according to the plan originally proposed, either with charcoal or imported coal, or a mixture of both.

To set up against this apparent saving, we have the expense of setting up two establishments instead of one; the double cost of superintendence and management; the dispersion of property, with the many inconveniences consequent upon that dispersion, so well known to men of business; the unavoidable mixture of ores of different qualities, which, as it has been repeatedly pointed out, require distinct modes of operating upon them; and, last of all, the fact that we are not likely, for some time to come, to raise more ore than would properly supply a single establishment, the success of which will greatly depend on the continuity of its operations. If Swansea, which smelts for three-fourths of the whole world, can only support eight houses, how can we, at present, hope properly to maintain two? Scantiness of our mining population imposes a certain limit upon the productiveness of our mines; and until labour is procured in adequate abundance, their productive capabilities cannot be greatly increased. The ore upon the ground, at present, is not in the unmanageable profusion which would warrant the adoption, summarily, of the proposed plan; and we confess, moreover, that it would be scarcely fair to our neighbours across the strait, to throw upon them the responsibility and expense of a first experiment. Let us begin with one establishment here, for which we possess all the requisite scientific and mechanical knowledge. If that succeed, the credit and profit will be our own; if it fail, either from the deficiency of fuel, or its greater expensiveness, or if it become insufficient for the wants of our mines, then we shall be legitimately entitled to engage the assistance of our Van Diemen's Land friends, and to share with them a full portion of our mineral advantages and gains.—*South Australian Gazette.*

THE GUN-COTTON—M. SCHONBEIN'S SPECIFICATION.

The specification of this patent (taken out in the name of Mr John Taylor, of the Adelphi) became due, and was enrolled on the 8th inst. The following is a correct abstract of its contents:—The patentee states, that the invention consists in the manufacture of explosive compounds applicable to mining purposes and to projectiles, and as substitutes for gunpowder, by treating and combining matters of vegetable origin with nitric and sulphuric acids.

The matter of vegetable origin which he prefers, as being best suited for the purposes of the invention, is cotton, as it comes into this country, freed from extraneous matters; and it is stated to be desirable to operate on the clean fibres of the cotton in a dry state.

The acids are—nitric acid of from 1·45 to 1·50 specific gravity, and sulphuric acid of 1·85 specific gravity.

The acids are mixed together in the proportion of 1 measure of nitric acid to 3 of sulphuric acid, in any suitable or convenient vessel not liable to be effected by the acids. A great degree of heat being generated by the mixture, it is left to cool until its temperature falls to 60° or 50° Fah. The cotton is then immersed in it, and, so that it may become thoroughly impregnated or saturated with the acids, it is stirred with a rod of glass or other material not affected by the acids. The cotton should be introduced in as open a state as practicable. The acids are then poured or drawn off, and the cotton gently pressed by a presser of glazed earthenware to press out the acids, after which it is covered up in the vessel, and allowed to stand for about an hour. It is subsequently washed in a continuous flow of water, until the presence of the acids is not indicated by the ordinary test of litmus paper. To remove any uncombined portions of the acids which may remain after the cleansing process, the patentee dips the cotton in a weak solution of carbonate of potash, composed of one ounce of carbonate of potash to one gallon of water, and partially dries it by pressing, as before. The cotton is then highly explosive, and may be used in that state; but, to increase its explosive power, it is dipped in a weak solution of nitrate of potash, and, lastly, dried in a room heated by hot air or steam to about 150° Fah. It is considered probable that the use of the solutions of carbonate of potash and nitrate of potash may be dispensed with, although actual experience does not warrant such an omission.

The patentee remarks, that nitric acid may be employed alone in the manufacture of explosive compounds; but that, as far as his experience goes, the article, when so manufactured, is not so good, and far more costly.

When used, care should be taken to employ a much less quantity by weight, to produce the same result, than of gunpowder; and it has been found that three parts by weight of the cotton produce the same effect as eight parts by weight of the Tower-proof gunpowder. The cotton, when prepared in the manner before mentioned, may be rammed into a piece of ordnance, a fowling-piece, or musket; or may be made up into the shape of cartridges; or may be pressed, when damp, into moulds of the form of the bore of the piece of ordnance for which it is intended—so that, when dried, it shall retain the required figure; and it may also be placed in caps, like percussion caps, and made to explode by impact. Lastly, the patentee states, that although he prefers the use of cotton, other matters of vegetable origin may be similarly treated with acids to form an explosive compound, and that acids of an inferior specific gravity may be employed.

The patentee having thus described the nature of the invention, and in what manner the same is to be performed, states, that he does not confine himself to any of the details above specified, so long as the peculiar character of the invention is retained—viz., the manufacture of explosive compounds from matters of vegetable origin by means of acids. But, to adopt the patentee's own expression—"What I claim, is the manufacture of explosive compounds from matters of vegetable origin, by means of nitric acid, or nitric and sulphuric acids."—*Mechanics' Magazine.*

NEW PATENTS.

C. May, Ipswich, Suffolk, civil engineer, for improvements in railway chairs, the fastenings to be used therewith, and in trenails.

J. H. Griesbach, Carlton Villas, Maida Vale, for improvements in the construction of railways, and in engines and carriages to run thereon.

B. T. Stratton, Bristol, agricultural machinist, for improvements in railways, and in wheels and other parts of carriages for railways and common roads, partly applicable in the construction of ships or other vessels, and improvements in the machinery for manufacturing certain parts of the same.

C. De Bergue, Arthur-street West, London, and J. C. Haddan, Upper Woburn-place, civil engineer, for improvements in wheeled carriages, and in panels and springs for carriages and other purposes.

D. Napier, Glenhellish Strachan, Argyleshire, for improvements in steam-engines and steam-vessels.

S. Moulton, Norfolk-street, Strand, for improvements in the construction of bridges.

W. T. Stevenson, Upper Baker-street, Lloyd-square, for improvements in regulating the generating of steam in steam-boilers.

P. M. Crane, Ynisceedwyn Iron-Works, near Swansea, for improvements in the manufacture of iron.

ACCIDENTS.

Bickershaw Colliery, Abram, near Leigh.—E. Heyes, in imprudently attempting to shift from one tub to another, while in motion, fell down the shaft, and was killed on the spot.

Monkwearmouth Colliery.—Michael Johnson and two other men, whilst doing some repairs to the shaft, were working upon what is technically called a "cradle," which is a large square platform of wood, suspended with ropes from each corner, and attached to another rope from the "crab," or "gin" (the cradle then being suspended at the depth of 140 fms.), and for the purpose of taking away any rubble stones, or for supplying them with materials, there was a "corf," which, on signals being made by Johnson and his fellow-workmen, was either raised or lowered as it was wanted. It appears that, as the corf was being hoisted up by the engine, it by some means caught the rope, which was attached to one corner of the "cradle," and threw Johnson over; he fell to a depth of from 40 to 50 fms., and beat on a temporary platform, by which he was killed; the other men had a very narrow escape, they having, with great presence of mine, caught hold of the rope by which it was suspended, and clung to it until the cradle was disentangled from the corf, and were retained in this awful situation for upwards of an hour.

THE LATE EXPLOSION AT THE YEW-TREE COLLIERY, NEAR KINGSWINFORD.—The adjourned inquest on the bodies of Job Marsh, J. Marsh, and N. Hodgetts, three of the boys killed by an explosion of gas at this colliery, belonging to Mr. B. Gibbons, was held on Thursday last, before T. M. Phillips, Esq., coroner, at the house of Mr. S. Hale, Gornal Wood. The evidence taken on this and the previous occasion clearly proved that the utmost precaution is used by the owner of the pit to prevent accidents. An air-head, in which is an air-pipe, has been constructed, for the purpose of promoting ventilation. It is the duty of the boys belonging to the pit to "buffet" out of the gate-roads any sulphur which might be found there, and the boys mentioned above were so engaged when the fatal explosion took place on the 23d ult. The sulphur on being "buffeted" by the boys at the further end of the gate-road passes up a "sump," and along the air-head, communicating with a chimney, through which the foul air escapes. On the occasion in question, however, a man named Love, upon quitting work between 5 and 6 o'clock, on the morning of the 22d ult. left, it is alleged, a lighted candle close to the top of the "sump" in the air-head; and the result was, that on the sulphur being buffeted by the boys, it passed up the sump, came in contact with the lighted candle, an explosion took place, and four of the seven boys who were engaged in buffeting were so severely injured that they died a few days afterwards. It was proved by the witnesses examined, that one of the rules laid down for the observance of the miners was, that none of them should leave any candle in the pit on their ceasing work; and that, before a fresh bandful of men resumed their daily occupation, the pit should be first tried with the safety lamp. It appeared that, during the night of the 21st ult., Love was at work in the air-head with J. Hickman, a boy 12 years of age, and they had three lighted candles. On the boy leaving the air-head, between 5 and 6 o'clock on the following morning, he extinguished his two lights, but left Love at the top of the "sump" in the air-head lying down, partly asleep, with a lighted candle fixed in a piece of clay above his head. The boy then went to the bottom of the shaft, when he was requested by B. Grey, the doggy in charge of the pit, to go and call Love out. He went accordingly to the bottom of the sump, saw a light in the air-head, and called to Love, who shortly afterwards came down the sump and left the working. About 6 o'clock E. Guest, one of the doggies, in company with J. Glazzard and a number of boys, went down the pit, but before any one went into the workings Guest tried the pit with the safety lamp, and on discovering that there was sulphur at the further end of the gate-road, he gave directions that no one should go into the workings with a lighted candle until the boys had buffeted out the sulphur. The boys went into the gate-road for that purpose, and shortly afterwards an explosion took place, which terminated in the death of four of the boys. Mr. Moses Taylor, ground-bailiff to Mr. Benjamin Gibbons, proved the rules adopted for ensuring safety in the pit, and produced a plan of the workings. Mr. E. Aston, ground-bailiff to Lord Ward, gave it as his opinion that every precaution was used by the owner of the pit to prevent accidents. He had examined the pit and found that proper means were adopted to promote ventilation. It was impossible that an explosion could have taken place without a lighted candle had been left in the workings prior to the boys commencing buffeting. Two or three other ground-bailiffs were in attendance to give similar testimony, but the coroner and jury thought the proper management of the pit had been so clearly proved that it was unnecessary to have their attendance. Mr. J. Ireland, surgeon, Kingswinford, having proved that the boys had died from the burns which they had received, the coroner read over the whole of the evidence in the presence of Love, who declined making any statement. The coroner then addressed some observations to the jury, remarking that Love had admitted to one of the witnesses that he had left the candle in the pit, and that the explosion took place in if they believed that he left the candle in the pit, and that the explosion took place in consequence of his doing so, he was guilty of manslaughter. The jury, after consulting together for a short time, returned a verdict of manslaughter against Love, who was retained in custody on the charge, and will take his trial at the next assizes. The other adjourned inquest, on the body of the boy Guy, was held in the afternoon of the same day, at Tansey-green Inn, Kingswinford, when a verdict of manslaughter was returned, as in the preceding case. It appears that at the time of the explosion a bandful of men were descending the shaft of this pit; and *if the new principle of an air-head had not been in existence in this colliery, the probability is that these men would all have been blown into the air and killed.—Wolverhampton Chronicle.*

THE MOSTON NEW COLLIERY.—We learn that this splendid mine, which has occupied a period of four years in sinking, was opened on Monday last, by a large party of gentlemen, who assembled at Moston, by the kind invitation of Mr. J. Stanley, of Ashton-under-Lyne, the proprietor. Several of the gentlemen, with a view of inspecting the works, ventured to descend the shaft, which is about 300 yards deep. The colliery is known as the Standard Pit, in which there are three mines, and which, on this occasion, were named by T. W. Mellor, Esq. The first was named the "Major Mine," the second the "Colonel Mine," and the third the "Stanley Mine." The latter mine measures 7 ft. 6 in., and is considered to be the best, and one of the largest seams of coal in this district. On the gentlemen returning to the surface, they brought with them some splendid specimens of coal from the larger mine. Having safely arrived on *terra firma*, the whole company partook of a collation, in a building adjoining the pit.—*Manchester Examiner.*

A quarry of good lithographic stone has been discovered on the southern coast of Arabia, and it has been proposed to export it to India, where lithographers are chiefly supplied from Europe.

A patent has been granted for the manufacture of iron coaches. An omnibus, carrying 19 persons, besides the driver and cad, is said to weigh only 11 cwts., and can be drawn by two ordinary horses, at the rate of 10 miles an hour.

PROGRESS OF FRENCH MINING INDUSTRY.

[FROM OUR PARIS CORRESPONDENT.]

A few days ago, the Minister of Finance presented a bill to the Chamber of Deputies relative to the customs. It has not yet been published, and some desire seems to be felt—but why, I know not—to keep its provisions secret for the present. It is, however, stated, on pretty good authority, that it contains clauses *for a reduction of the duty on sheet-iron, iron, copper, and zinc, destined for shipbuilding purposes, but makes no alterations in the duties on iron, cast-iron, or coal.* Until the bill be published, your readers must only receive this information as an *on dit*, but I believe it to be well founded. Assuming these concessions to be as stated, you will perceive that they are by no means of a nature to satisfy public expectation; and yet it was only after a great deal of hesitation, that the Ministers could screw up their courage to propose them. A little while ago, they gave positive assurances to the ironmasters, that the iron duties should not be touched at all—but no sooner was the pledge given, than they became alarmed at the wrath their determination could not fail to create in the public mind, and they felt themselves under the imperative necessity of doing something. It is to be lamented, that they did not boldly attack the iron monopoly at once, as, by so doing, they would have conferred a great service on the country, and gained such great popularity for themselves, as would have amply compensated for the loss of the monopolists' votes. But, though the proposed modifications of the tariff be nothing like what we were entitled to expect, it is still certain, that any concession with respect to the importation of sheet-iron, *must turn almost exclusively to the advantage of England*—inasmuch as England is the only country that can fabricate it. The extent of the advantage will, of course, depend on the extent of the modifications proposed by the Government—but, as they must be sweeping to be of any benefit at all, I apprehend that a very large demand may be safely calculated upon. I have heard it said positively, that the duties are to be entirely abolished—but it would be rather too much to expect so bold a measure from such timid men as the present Ministers. I repeat, however, that the duties must be brought down to a very low figure indeed, or it will be a bitter mockery to represent their reduction as any advantage to the shipping interest. The question then arises, what will be the probable quantity of sheet-iron which France will require to receive from England? At present it is absolutely impossible to say, with the slightest approach to certainty—but I am inclined to think, that it will be very considerable. If your readers, who are interested in the question, would take the trouble of looking back to some of my letters of about twelve months ago, they will find a mass of details, peculiarly interesting at this moment, with respect to the merchant navy of this country; and they will, perhaps, be able to find therein the means of forming an opinion on this important point of the probable demand. The shipowners of France, you will remember, allege that the present deplorable state of the shipping interest is mainly caused by the excessive dearness of iron, and in their remonstrances to the Government on the subject, they have always promised to restore the mercantile navy to its pristine splendour, if a modification of the iron duties should be accorded. If they are really desirous of promoting their own interests, as of course they are, the liberty to introduce sheet-iron, on moderate terms, cannot fail to give an immense impetus to shipbuilding, especially as almost all shipowners in France are determined to build no more vessels of wood, but to build entirely in iron.

A meeting of the great Coal Company of the Loire was held a few days ago, at which a dividend of 15 fr. per share for 1846 was declared. The report read to the shareholders was very interesting; but not having yet received a copy, I am not able to go into details. A file of the St. Etienne newspapers have been sent to me, together with sundry pamphlets and documents relative to the great question of the amalgamation of so many of the Loire coal companies into this one great concern. It appears that the St. Etienne people are more strongly opposed than ever to the amalgamated companies, and they allege that already have the public begun to suffer from the great monopoly. Petitions are being got up to the Chambers, praying them to dissolve the company. The company, on their part, are making great exertions to maintain things as they are. The dispute seems to be drawing to a crisis; for, in one of its recent sittings, the Municipal Council of St. Etienne came, after two or three days' solemn debating, to a formal resolution, to the effect, that the Council of the Prefecture should be solicited to allow the Mayor of St. Etienne, in his official capacity, to prosecute the company in the name of the town, for the offences of *monopoly* and *coalition*, which, being in violation of the penal code, are punished with fine and imprisonment. The adoption of such a resolution by such a body is certainly a fact of great gravity. It is not likely that a Municipal Council would have come to the vote on light and insufficient grounds. What, then, can be thought of the company for exciting such an opposition against it, in the short period it has existed? Has it forgotten that when it was first formed, now little more than a year ago, it gave a pledge to the Chambers, to the Government, to the country, that it would not attempt unfairly to increase the price of coal, and that it was on that condition alone that it was allowed to stand? Surely, its own interests, properly understood, should have taught it not to lay itself open to complaint, especially at the commencement of its career. It should not have forgotten that its monopoly is truly gigantic, and that an abuse of it really cannot be tolerated with any regard to the public interests. Let us not, however, condemn the company merely because the Municipal Council of St. Etienne is about to drag it before the police-court, for a violation of the penal code. It will, no doubt, shortly be cited to the higher tribunal of the Chamber of Deputies, and it is only right to wait to hear its answer to the allegations of its adversaries. Nevertheless, it cannot be denied that the vote of the St. Etienne Municipal Council creates a strong presumption against it. The accusations of the Council are very distinctly laid down, and are all of great gravity, they are:—1. That since the amalgamation coal has become much dearer than it ought to be.—2. That the salaries of the miners have been lessened, in consequence of what are called the *benues* being made to contain a larger quantity of coal, without any additional pay being allowed.—3. That the interests of the persons from whom the surface of coal-pits is rented have been injured.—4. That the pits are badly worked, and that accidents are continually taking place in them.

It has been stated in the mining circles, that a company has been formed, or is forming, with the intention of purchasing, if possible, the great coal concessions of Firmin. A capital of 12,000,000 fr. will, it is believed, be necessary to effect this object—8,000,000 fr. of which would have to be devoted to the purchase and working of the pits, and the remaining 4,000,000 fr. are proposed to be employed in the formation of a railway from the mines to the Paris and Lyons line.

"*St. Dizier, April* 1.—*Fers laminés*, 380 fr. to 390 fr.; *fers battus à la houille* for Paris, 380 fr.—for the province, 390 fr.; *essieux bruts*, 385 fr. to 390 fr.; *bandages percés*, 415 fr. to 420 fr.; *fils de fer*, 5 fr. 20 c. to 5 fr. 30 c. In wood no affairs.—*Paris, Wednesday.*

BELGIUM.—The terms on which the Minister of Public Works had contracted for the supply of rails, for the State railway—viz.: 14*l.* per ton—were stated in my last letter. The reason of such an excessively high price having been asked, and accorded, was, that the Government had imposed upon the contractors the condition that credit should be given it for the rails, until October next, for the payment of one-third; until the first quarter of 1848, for the payment of a second third; and until the second quarter of 1849, for the payment of the last. A great deal of discussion took place on this subject in our business circles, and it was generally considered that the Government had made a bad bargain. The day after my letter was dispatched, the attention of the Chamber of Representatives was called to the matter, and an interesting discussion ensued—in the course of which it was manifested that the general feeling was, that the Government had acted most imprudently in demanding credit at all, and especially in paying such a price to obtain it. A very plain notification was given to the Minister of Public Works, that the Chamber would never consent to vote money to pay rails at 14*l.* a ton, when it was notorious that they could be had for 12*l.* After some days' hesitation, the Minister declared that he would not ratify the contract that had been made with the iron establishments; and he has since given formal notice that, on the 14th, he will receive other propositions for the supply of 2200 tons of rails, in four lots. No more credit is asked for; and the clause of the contract, relative to payment, states that nine-tenths of the amount shall be paid on delivery, and the remaining tenth to be retained as a guarantee for the fulfilment of the contractors' obligations, and be paid only when all the quantity of rails contracted for shall have been delivered, which is not required to take place for two years.

A strange, but, at the same time, true, declaration was made by the Minister of Public Works, in the debate to which the recent adjudication gave rise. He said that, "As regarded the supply of rails, there was no sort of competition in the country; they had six establishments which manufactured rails, and all the six entered into an understanding, and agreed upon a price to be demanded; if, then, they had chosen to demand 400 fr. a ton, instead of 350 fr., or 350 fr. ready money instead of 350 fr. with two years' credit, there were no means of preventing them, and their prices must be submitted to, or the supply of rails must be dispensed with." This certainly, I repeat, was a strange confession for a Minister of the Crown to make; but the statements it contains are strictly true. Why, however, did not the Minister tell those six establishments that he would not submit to their dictation? Why did he not tell them that rails can be bought at a reasonable rate in England; and that if they cannot, or will not, sell theirs at a fair price, English rails should be imported into the country? Nay more—How comes it that the Government has allowed six establishments to form such a monopoly, as enables them to dictate to it, and, of course, to the whole country, as well as to it? Ministers know well that we have, for a long time past, been paying millions more for our rails than we might have purchased them in England; and it is a disgrace to them, that they have not taken measures for putting an end to so scandalous a thing. The truth is, that we are almost as much at the mercy of our ironmasters, as the French are at the mercy of theirs. In proportion to the size of the country, Belgium is extraordinarily rich in iron and coal; but in proportion to its mineral wealth, coal and iron are dearer in Belgium than in any other country. And this comes of our ironmasters being "protected" by Custom-house Tariffs. Protected, forsooth! as if they had need of protection! Assuredly, if any class on earth could do without protection, it is the ironmasters of this country. What can they want with it? Have they not got ore in abundance—coal in abundance—capital immensely large—establishments completely finished—as much intelligence as other men—as much enterprise as any? But, whether they fancy themselves in need of protection or not, matters little for the people are beginning to be thoroughly disgusted with their monopoly, and will, I doubt not, soon knock it on the head.

The meeting of the Compagne des Charbonnages Belges, which was originally summoned to take place in Paris, is to be held at Mons on 2d May. This company is one of the many in Belgium, in which French capitalists hold the great majority of the shares. M. le Baron J. de Rothschild is the chairman of it.

Cockerill's establishment, at Antwerp, has just launched another of the three iron steamers it contracted to build for the Government. The third, and last, will be ready in a few months.

The cannon manufactory at Liege is almost every week receiving new orders from the continental powers. Within the last few days, it has undertaken to make 25 cannons of 18, and 20 of 12, for the fortress at Ulm.

Proceedings of Public Companies.

MEETINGS DURING THE ENSUING WEEK.

MONDAY.....East Indian Railway—London Tavern, at Twelve for One.
TUESDAY.....Kirkcudbrightshire Mining Company—offices.
Wheal Seton Mining Company—at the mine.
Patent Galvanised Iron Company—London Tavern, at Two.
WEDNESDAY...Great Western Railway of Bengal—London Tavern, at Twelve for One.
Licensed Victuallers' Insurance Company—offices.
THURSDAY.....Demerara Railway Company—London Tavern, at One.
East Coombe Mine, Swymbridge—Fortescue Arms, Barnstaple, at Two.

[*The meetings of Mining Companies are inserted among the Mining Intelligence.*]

ROYAL MAIL STEAM PACKET COMPANY.

The tenth annual meeting of this company was held at the London Tavern, on Thursday last, and was very numerously attended.

ANDREW COLVILLE, Esq., in the chair.

The SECRETARY read the following report of the directors:—

REPORT.

The working account, as contrasted with that of the preceding year, shows an increase in the disbursements, amounting to 10,890*l.* 3s. 2d., occurring chiefly under the heads of wages, provisions, and stations. The general rise in the rate of seamen's wages, an addition to the pay of the officers, which the court have considered for the interests of the company, and the extra charge arising from having to send out the *Eagle* for intercolonial service to replace the *City of Glasgow*, will explain the increase under the head of wages. The increase under the head of provisions is to be attributed to the additional number of passengers, and, in part, likewise, to the change of intercolonial steamers alluded to above. The charge for stations has been increased by the establishment of an agency and other arrangements at Panama, and by the expense incurred in increasing the coaling accommodation and general efficiency of the depôt at St. Thomas. The only charge upon the insurance fund during 1846 is a sum of 275*l.* 2s. 9d., arising out of sundry small liabilities; and it will, therefore, be seen that the investment under this head up to the end of the year amounted to 40,281*l.* 5s., which has since been augmented by the annual appropriation of 25,000*l.* for the year 1847, making a total of 74,281*l.* 5s., now invested in 3½ per cent. Government Stock. Having explained the principal causes which have occasioned increased disbursements, amounting to 10,890*l.* 3s. 2d., it is most satisfactory to notice that the receipts from freight and passage-money show an augmentation to nearly double that amount, exhibiting an improvement upon the year 1846 of 20,697*l.* 16s. 10d. It is, moreover, matter of congratulation to notice, that this steady advance (with the single exception of outward freight), has occurred under every head of receipts for cargo and passengers, outward, intercolonial, and homeward. The small falling off of 518*l.* 4s. 7d., in outward freight, may be ascribed to the shipments of quicksilver for Mexico having been interrupted during the first part of the year, in consequence of the commencement of hostilities between that country and the United States of North America. The surplus upon the working account shows an increase upon the year 1846 amounting to 9807 13s. 8d.; and so far as the transactions of the year 1847 can be known at present, the receipts of the company are still steadily advancing.

The arrangements for conveying passengers and treasure across the Isthmus of Panama, are now completed; and an agreement has been signed between the Royal Mail Steam-packet Company and the Pacific Steam Navigation Company, fixing the rate of freight, and all other particulars, so that there shall be every encouragement for parties to avail themselves of this line of communication between the Atlantic and the Pacific Oceans. Unceasing exertions are made, not only to keep the company's ships in good repair, but to give them additional strengthening where necessary, and to improve their passenger accommodation by all the means that experience can suggest. Six ships were re-coppered, and two ships received new boilers, in 1846. Three ships have been recoppered already during the present year, and one ship is now receiving new boilers. Two other sets of new boilers are in progress—one of which, if not both, it is hoped to get put on board before December next. These measures, and bringing the *Conway* (a new ship) into operation, will, it is trusted, maintain the service in that full efficiency, which is as essential to the interests of the company, as it is desirable to ensure the punctual discharge of its contract with her Majesty's Government. Since the above report was prepared, a confirmation of the loss of the *Tweed* has been received this morning. The loss of life, in addition to that of the ship, is deeply to be lamented; but it is satisfactorily to find that the energy and firmness of the passengers, as well as that of the officers and crew, were most praiseworthy, and tended much, under Providence, to the ultimate safety of the survivors who reached the reef from the wreck. It would be premature to offer any comment on this unfortunate accident, but the circumstances shall be strictly inquired into.

The balance-sheet was also placed in the hands of the proprietors, from which it appeared, that the gross income of the company for the past year was 407,116*l.* 18s. 2d.; and the disbursements, 285,478*l.* 8s. 7d.—leaving a surplus of 121,638*l.* 9s. 7d.

The CHAIRMAN, in moving the adoption of the report, much lamented the loss of the *Tweed*, and more particularly the loss of life which had unfortunately taken place. Every person must see, however, that by the energy and exertions of the crew, and the steady perseverance of the passengers, under the great difficulties in which they were placed, a means of escape, under Divine Providence, had been provided for many. It would, perhaps, be satisfactory to the meeting to be made acquainted with the fact, that an arrangement had been made to prevent any interruption of the service in the West Indies, through the loss of this vessel. Except in a very small portion of the communication between Bermuda and Nassau, the whole service would be satisfactorily carried on without interruption, till another ship could be sent out. To assist the requirement of the West Indies a new ship, built and intended for the intercolonial trade, and to replace a small steamer, was now appointed to the service. The *Conway*, he hoped, would depart from Southampton on Saturday next, which vessel would be of great assistance in carrying on the service. In consequence of the loss of the *Tweed*, the directors took immediate steps to provide another ship; and he hoped they had succeeded in procuring one at a very moderate price, which was, notwithstanding, a very sound and well-built vessel, and, in his opinion, would prove as good a ship as any in the service. In relation to that paragraph in the report about the transport of money and passengers across the Isthmus of Panama, he had the satisfaction to inform the proprietors, that by the ship just arrived they had received the first fruits of their expectations—for about a quarter of a million of specie, and 20 passengers, came from the Pacific, or west side of the Isthmus, by that vessel—(hear, hear)—and the more that traffic increased, the greater would be the addition to the receipts of the company. The revenue under the head of passengers, and from other items, had so materially surpassed the receipts of the former year, that he thought they might safely conclude that their affairs were yet in a prosperous state. (Hear, hear.) He would now move, that the report be received, adopted, and circulated amongst the proprietors.

Mr. RIDGWAY would like to know, what were the earnings in the month of August, 1846, and what they were in the month of August, 1846.—Mr. POYNDER said, they had come there to receive the annual accounts. He thought the question of the hon. proprietor had been disposed of at the annual meeting last year.—Mr. RIDGWAY said, what he alluded to was a subject for discussion at this meeting. It had been asserted, that he had made statements to prejudice the interests of this company. This he denied—for, as an original shareholder, it had always been his desire to advance the interests of the company.

The CHAIRMAN, in reply to the various questions of Mr. Ridgway, said, the question as to the receipts of August was answered at the last meeting, and was found to be satisfactory. (Hear, hear.) With regard to the office expenses and law expenses not being more in detail, he thought the proprietors would admit, that they were more particular in their accounts than many other steam companies—but this was because they had no wish for mistification, or that anything should be kept back from the proprietors. (Hear.) The law expenses were sometimes more, and sometimes less—in this case they were about 850*l.*, and the office expenses 1750*l.* As to the salaries, he thought the proprietors would not require him to go into the minute particulars for the advance of the clerks' salaries. (No, no.) He could assure them, that it was not done without much consideration, for the directors had a wish to be as economical as possible in all their arrangements. (Hear, hear.) In respect to the loss on the hulk *Superior*, he would observe, that this vessel had become worn out in the West Indies, and being no longer required as a coal depôt, though indispensable during the early part of the company's operations, she had been sold for a trifle—thus, leaving a loss of nearly the full amount of her first cost. There had been an allusion to the investment of 55,000*l.*—that sum was lent to the North Western Railway Company on its debentures, and the cash in hand was put out at interest, for the benefit of the company.

The report was then adopted unanimously.

The CHAIRMAN then proposed that a dividend of 1*l.* 15s. per share for the half year, ending the 31st of December last, be declared, and made payable on Tuesday, the 13th inst.—This was passed unanimously.

The CHAIRMAN said, there was one other motion, which was the re-election of Mr. Baring and Capt. Mangles, as directors, and Mr. Roberts as auditor. As there were no other candidates, he presumed they would agree to the re-election of these gentlemen. (Hear, hear.)—Passed unanimously.

Mr. RIDGWAY was about to allude to some observations of Mr. Baring at a former meeting; but, at the request of the chairman, and from the cries of "question," the hon. proprietor dropped the subject.

Mr. POYNDER then moved a vote of thanks to the chairman, deputy-chairman, and directors of the company, which was seconded and agreed to unanimously.—The meeting the adjourned.

Transactions of Scientific Bodies.

MEETINGS DURING THE ENSUING WEEK.

Society.	*Address.*	*Day.*	*Hour.*
Geographical	3, Waterloo-place	Monday	8½ P.M.
British Architects	16, Grosvenor-street	Monday	8 P.M.
Medical	Bolt-court, Fleet-street	Monday	8 P.M.
Medical and Chirurgical	53, Berners-street	Tuesday	8½ P.M.
Civil Engineers	25, Great George-street	Tuesday	8 P.M.
Zoological	11, Hanover-square	Tuesday	8½ P.M.
Syro-Egyptian	71, Mortimer-st., Cavendish-sq.	Tuesday	7½ P.M.
Geological	Somerset-house	Wednesday	8½ P.M.
London Institution	Finsbury-circus	Wednesday	7 P.M.
Graphic	Thatched-house Tavern	Wednesday	8 P.M.
Pharmaceutical	17, Bloomsbury-square	Wednesday	9 P.M.
Literary Fund	73, Great Russell-street	Wednesday	3 P.M.
Royal	Somerset-house	Thursday	4 P.M.
Antiquaries	Somerset-house	Thursday	8 P.M.
Royal Society Literature	4, St. Martin's-place	Thursday	4 P.M.
Royal Institution	Albemarle-street	Friday	8 P.M.
Asiatic	14, Grafton-street	Saturday	2 P.M.
Westminster Medical	27 A, Sackville-street	Saturday	8 P.M.

SOCIETY OF ARTS.

March 31.—W. POLE, Esq., F.R.S. (Vice-President), in the chair.

The following gentlemen were elected members:—John Laurie, John Diston Powles, William Lobb, M.D., Michael Haubart, Alfred Lapworth, George John Allen, George Gilbert Scott, John Moore, Miguel de Folly, Thomas Brown Jordan, Thomas Mackereth, John Wilson Lowrie, Warren Hale, Edward Hagen, Wm. Bullock Webster, J. Richardson, John Harrison, Dominic Colnaghi, Leonard A. Lloyd, and D. R. Hay, Esqs.

M. Ricardo, Esq., gave an account of his Indicator for ascertaining the Speed of Railway Trains. The machine consists of a pair of governors, to which motion is given by means of a band, working on a horizontal wheel, attached to one of the carriages; as the speed of the train increases, the governors fly open, and pull round a hand, which points out, on a graduated dial, the number of miles per hour at which the train is travelling. The governors are prevented from flying open, with a jerk, by two pieces of vulcanised India rubber, which lengthen gradually, as the speed of the train increases.

The secretary read a paper, by Mr. T. R. Crampton, on the Working of his Large Wheel Narrow-gauge Engine, the *Namur*, for the design for which he last session received the society's Gold Isis Medal. The author having made some remarks on the statement put forth by him last year, as to the advantages to be possessed by an engine, built on his principle, over those on the old plan, proceeds to give the following account of the *Namur*:—

The *Namur* is a six-wheeled engine, with the whole of the working parts outside.

The diameter of the driving wheel is	7 feet
Ditto supporting ditto	3 ft. 9 in.
Distance between the centre of the extreme wheels	13 feet
Diameter of cylinder	16 inches
Length of stroke	20 "
Number of tubes	182
Length of ditto	11 feet
Diameter of ditto—outside	2 inches
Length of fire-box	4 ft. 3 in.
Breadth of ditto	3 ft. 5 in.
Area of fire-grate	14 ft. 6 in.
Surface in fire-box	69 feet
Surface of tubes—inside	927 "
Total surface	989 "

This engine is constructed for the Namur and Leige Railway, and has run on the London and North-Western Railway, with every variety of train, a distance of 3300 miles. In the course of the experiments, the following speeds have been reached:—With a train of trucks, loaded with coke, and weighing 80 tons, exclusive of engine and tender, 51 miles per hour on a level; with a train weighing 50 tons, 63 miles per hour was attained between Tring and Wolverton; but the most severe test an engine can be put to, is when it has no train behind it. An experiment of this kind was tried—Capt. Coddington, Inspector-General of Railways, and Capt. Simmonds, his assistant, being on the engine at the time—a speed of 75 miles an hour was attained on level ground, going round a curve between London and Harrow; the speed was taken by Capt. Coddington and Capt. Simmonds, and both were perfectly satisfied with its steadiness at that rate of speed. A second engine is building for the North-Western Railway, with 8-feet driving-wheels. The author concludes, by offering, at an early date, to furnish an account of the expense of working the engine, and its consumption of coke, water, &c.

Mr. HARDINGE observed, that Mr. Crampton had done perfectly right by increasing the dimensions of the fire-grate; for while the heating surface of the ordinary engines has been quadrupled, the fire-grate has not been increased 30 per cent. He considered that the experiments, as far as they had gone, were quite satisfactory.

Mr. MACCONNELL considered that, as far as the experiments had gone, the engine had performed well; and that Mr. Crampton might congratulate himself on having lowered the centre of gravity, increased the area of the fire-bars, and the size of the driving-wheel.

LITERARY NOTICES.

A Familiar Explanation of the Art of Assaying Gold and Silver, and its Bearing upon the Interests of the Public Demonstrated. By J. H. WATHERSTON goldsmith. London: Smith, Elder, and Co., Cornhill.

This little work has been got up by the author, to explain, in a familiar and easy manner, the object of the assayer of the precious metals; the methods and processes by which those objects are obtained; and to clear up, in the minds of the public, that appearance of mystery with which the subject has for centuries been surrounded—but which, in the present enlightened age, ought certainly not to exist. We will just quote a paragraph from his preface, in explanation of the imposition and misrepresentations practised by the trade. He says—"If it were generally known that gold is divided into 24 parts, or carats—that it is more or less valuable only in proportion as it contains more or less of the precious metal—and that, whilst it may be wrought into articles of the fineness of 22 carats, worth 3*l.* 17s. 10½d. per oz., it may, on the other hand, be only half, or less than half, fineness. If such facts as these were generally known, we should not see people duped by the advertisements which appear in our papers, thus sometimes ingeniously contrived—'Fine gold chains, weighing 5 sovereigns, for 5*l.* each.' This would be the case, if of standard gold—whereas, they are, perhaps, of only half that fineness, and worth *in gold* only 2*l.* 10s., leaving 2*l.* 10s. for manufacture; and, consequently, the real value is concealed." The methods of making gold, silver, and parting assays, are most clearly described—so that the merest tyro could, from the instructions, succeed, after a little practice; and we think it will prove a valuable little publication, particularly to those engaged in the gold, silver, and jewellery trades.

A Popular Atlas of the World, consisting of detailed Maps of the different parts of the Globe, Illustrated by Geographical and Statistical Descriptions—No. 2 By JAMES WYLD, Geographer to the Queen and Prince Albert, Charing-cross East. London. J. Wyld, and Simpkin and Marshall.

We have received the second Number of this highly interesting work, which fully bears out the observations we felt justified in making on the appearance of the first Number. The illustrations are—the world, on Mercator's projection, and a map of Ireland: and it may be well to observe here, that each Number has two—one 24 by 17 in.; the other *double that size*, or 34 by 24 in. No. 2 describes the astronomical and geographical features of the globe, ethnological division of the human race, table of languages, religious sects, the various states, their connections, population, extent of territory, &c. The description of Ireland follows, which is equally graphic and correct with that of England in the first Number. There is one drawback to the value of the work, in its "getting up"—viz.: sending the sheets out in the state in which they leave the press—not pressing, which we imagine might be easily done, at little expense, would render the work perfect.

Our excellent contemporary, the *Liverpool Mercury*, has acted judiciously we think, in following the immensely progressive strides taken by that town and its neighbour, Birkenhead, in commercial distinction. Emboldened by the success which has deservedly attended its long existence, and aware of the requirements the increase of commerce and readers has occasioned, the spirited conductors have resolved on publishing the *Mercury* twice a week. The first bi-weekly number appeared on Tuesday, and, appropriately enough, contained an elaborate and embellished account of the opening of the magnificent docks at Birkenhead, with all the gratifying scenes accompanying the festival.

IRON, HARDWARE, AND METAL TRADES' PENSION SOCIETY

—FOR GRANTING PERMANENT RELIEF TO DESERVING AND NECESSITOUS MEMBERS OF THOSE TRADES, AND TO THEIR WIDOWS.

The FOURTH ANNIVERSARY FESTIVAL of the above SOCIETY will be HELD at the London Tavern, on WEDNESDAY, the 14th of April,

The Right Hon. the LORD MAYOR in the chair,

Supported by the SHERIFFS of LONDON and MIDDLESEX.

STEWARDS:

The Right Hon. Lord Wharncliffe	W. Gould, Esq.
The Right Hon. Lord Dudley Coutts Stuart	Daniel Green, Esq.
W. Thompson, Esq., Ald., M.P., President	George Oliver, jun., Esq.
W. T. Copeland, Esq., Ald., M.P.	F. W. Morgan, Esq.
Sir Chapman Marshall, Ald.	M. Pistow, Esq.
John Johnson, Esq., Ald.	Thomas Constable, Esq.
Sir James Duke, Ald., M.P.	R. Bull, Esq.
Thomas Challis, Esq., Ald. and Sheriff	R. Dale, Esq.
R. W. Kennard, Esq., Sheriff, Vice-President and Trustee	B. Ridge, Esq.
John Masterman, Esq., M.P.	John Faulkner, Esq.
R. Martineau, Esq., Mayor of Birmingham	J. R. Holmer, Esq.
T. B. Turton, Esq., Master Cutler, Sheffield	V. Hurst, Esq.
T. B. Simpson, Esq., V.P., Treasurer, and Trustee	James Hayward, Esq.
H. J. Vardon, Esq., V.P. and Trustee	Samuel Ellis, Esq.
H. L. Taylor, Esq., V.P. and Trustee	W. S. Burton, Esq.
T. Hawkins, Esq., V.P. and Hon. Sec.	F. Barron, Esq.
John Dale, Esq., V.P.	John Lee Benham, Esq.
E. L. Betts, Esq., V.P.	W. O. Lamond, Esq.
Richard Stuart, Esq., V.P.	A. H. Farwig, Esq.
T. W. Kennard, Esq.	William Bennitt, Esq.
	W. H. Files, Esq.
	B. Fowler, Esq.

Dinner on the Table at Six o'clock precisely.

The musical arrangements will be under the direction of Mr. Hobbs, of her Majesty's Chapels Royal.

Tickets, One Guinea each, to be had of the Honorary Secretary, 67, Upper Thames-street; or of Mr. H. L. Taylor, 10, Queen-street, Cheapside; or at the bar of the London Tavern.—An ELECTION of THREE ADDITIONAL PENSIONERS will take place in the month of MAY next. THOMAS HAWKINS, Hon. Secretary.

BANWEN IRON COMPANY—OFFICES, 23, THREADNEEDLE-STREET, LONDON.

—Notice is hereby given, that all SHARES in this company, on which NO DEPOSITS or CALLS have been PAID, will, at the expiration of 21 days from the date hereof, be declared to be FORFEITED, unless all sums due in respect of the same, with interest thereon, be paid into the bankers' of the company, Messrs. Spooner, Attwood, and Co., on or before the 16th day of April next.

London, March 27, 1847. By order, S. P. HARRIS, Secretary.

BLAENAVON IRON AND COAL COMPANY.

—Notice is hereby given, that the ANNUAL GENERAL MEETING of the shareholders of this company will be HELD at their offices, Pancras-lane, London, on Friday, the 23d of April next, at Two o'clock precisely, when the accounts and transactions of the past year will be laid before them. By order of the board,

Offices, 4, Pancras-lane, London, March 19, 1847. JAMES BOOTH, Sec.

BRITISH IRON COMPANY (Old Company, established 1825).

—Notice is hereby given, that this COMPANY being about to be DISSOLVED, under the Act 7 and 8 Victoria, cap. 46, all PERSONS INDEBTED to the company are required forthwith to PAY the AMOUNT due from them; and all PERSONS having any CLAIMS on the company are required to SEND in the SAME to me, at the New British Iron Company's offices, South Sea House, London, preparatory to the final liquidation of the company's affairs. By order of the directors,

ROBERT SMITH, Secretary.

PATENT GALVANISED IRON COMPANY.—The HALF-YEARLY GENERAL MEETING

of this company will be HELD at the London Tavern, Bishopsgate-street, on Tuesday, the 13th April next, at Two o'clock precisely, when the report of the directors, and the accounts for the half-year, ending 31st Dec., will be submitted. Three of the directors, and one of the auditors, will retire by rotation, but, being eligible, offer themselves for re-election. Any proprietor intending to offer himself as a candidate for the office of a director, must give seven days' previous notice to the secretary, at the office.

This meeting will be made SPECIAL and EXTRAORDINARY, for the purposes of altering and extending clause 90th in the Deed of Settlement, and enacting such other laws, rules, or regulations for the company as may be necessary, and of considering the propriety of authorising a call on the new shares of the company.

A SECOND EXTRAORDINARY and SPECIAL MEETING will be HELD, at the same place, on Tuesday, the 20th April, at Two o'clock precisely, for the purpose of confirming, or otherwise, the resolutions that may be passed at the first extraordinary meeting aforesaid. By order of the board.

3, Mansion House-place, London, March 30, 1847. S. VINCENT, Secretary.

PATENT GALVANISED IRON AND WIRE ROPE WORKS,

MILLWALL, POPLAR.

ANDREW SMITH begs to inform the Mining, Railway, and Shipping interests, that he has obtained a PATENT for an IMPROVED METHOD of GALVANISING IRON, producing a much superior article at a considerable saving in cost—the improved process for galvanising wire rope, adding only £10 per ton instead of £20, under the ordinary processes. The rope is extensively used in damp situations, for mining and railway purposes, and for ships' standing rigging.—Mr. J. S. Tregellas, Truro, agent for Cornwall.

EAST OF SCOTLAND MALLEABLE IRON COMPANY.

—NOTICE.—Notice is hereby given, that a GENERAL MEETING of the shareholders of this company will be HELD within Mrs. Hutton's Inn, Dunfermline, on Friday the 30th day of April current, at Twelve o'clock noon, for the purpose of taking into consideration (agreeably to the recommendation of last general meeting of shareholders), "what alteration (if any) is necessary to be made on the 3d clause of the contract of copartnery, and on the 30th clause, as relative thereto;" as also, for considering the proposal of amalgamation with the Forth Iron Company, announced in advertisement of 4th March last; and the alteration on the contract necessary for carrying that measure (if entertained) into effect; as well as any other alteration thereon which may then be suggested as expedient.

The shareholders are respectfully reminded that, in terms of the contract, they are not entitled to vote at any general meeting in respect of shares on which the calls due have not been paid; nor unless they shall have been *bonâ fide* shareholders, duly registered, at least five days before such meeting. They will also please observe that, when any transfer of shares is presented at this office for registration, evidence must be therewith proved, that all instalments due on such shares have been fully paid.

The directors take this opportunity of reminding the shareholders, that the second call of £1 5s. per share became due on the 24th ult., and request, that those who have not yet paid the same, will do so immediately. By the contract of copartnery, the directors are authorised to declare (simply by letter under the hand of the secretary) the forfeiture of those shares on which the past-due calls, with interest, shall not have been paid within one month after the date fixed for payment; and as the period, so far as regards the said call, will expire on the 24th current, they are desirous that the shareholders should keep in view the risk of loss which they may incur by delaying a settlement beyond that day.

By order of the board of directors, A. ALISON, Chairman.

Secretary's office, Dunfermline, April 1, 1847. J. S. RONALDSON, Secretary.

Price One Shilling and Sixpence,

PROPOSITIONS IN AID OF CONSTRUCTING AND SAFELY WORKING,

on a plan to ensure (without risk) a return of 7½ per cent. per annum for whatever amount of capital may be employed,

TEN THOUSAND MILES OF RAILROAD, &c.,

To CONNECT, with the exception of the short sea passage to Antwerp or Flushing, LONDON WITH CANTON, IN CHINA (a 12 days' journey only); with ramifications to all the principal cities, towns, and works of Europe and Asia, and to many in Africa also, if thought desirable; by means of which roads,

A DAILY POST AND FREE INTERCOURSE,

Commercial, social, and philosophical, may be established and permanently maintained over a population of from 600 to 700 millions of people, and the blessings of real civilisation thus spread over the globe.

"The wise and active conquer difficulties by daring to attempt them; but sloth and folly shiver and shrink at the mere sight of toil and hazard, and actually make the impossibilities they fear."

London: published at the office of the *Mining Journal, Railway and Commercial Gazette*, 26, Fleet-street.

ELECTRO-TELEGRAPHIC CONVERSER.—

Messrs. BRETT & LITTLE respectfully recommend Directors of Railways, Mining Companies, and others, to DELAY the ADOPTION of any particular TELEGRAPH, until the completion of their patents shall place Brett and Little in a position to introduce a most perfect and effective instrument, at about one-third the cost of those now sent in use.—140, Holborn-bars.

GALVANIC BATTERY.—CAUTION.—We hereby CAUTION

all persons AGAINST MAKING, SELLING, or USING, or CAUSING to be MADE, SOLD, or USED, a CERTAIN BATTERY, denominated a PERCOLATING GALVANIC TROUGH, or altering, or causing to be altered, any description of galvanic battery to that principle—the same being an infringement of our patent right, and a portion of the apparatus connected with our Patent Electro-Telegraphic Converser; for every infringement of which, after this notice, proceedings will be forthwith instituted.

140, Holborn-bars. BRETT & LITTLE.

STEAM COAL—WITHOUT SMOKE,

as per experiments made at her Majesty's Dockyard, Woolwich.

CAMERON'S COALBROOK STEAM COAL, AND SWANSEA AND LOUGHOR RAILWAY COMPANY.—(Completely Registered and Incorporated.)

OFFICES—2, MOORGATE-STREET, LONDON.

The directors are now prepared to supply steam ship companies, manufacturers, shippers, and others, with the company's steam coal, either at the company's wharf at Swansea, or in London. A statement, showing by comparative trial the superiority of this coal for steam purposes over every other, and a scale of prices, may be had on application at the company's offices here, or at their wharf at Swansea.—March 18, 1846.

PATENT IMPROVEMENTS IN CHRONOMETERS,

WATCHES, AND CLOCKS.—E. J. DENT, 82, Strand, and 33, Cockspur-street, watch and clock maker, BY APPOINTMENT, to the Queen and his Royal Highness Prince Albert, begs to acquaint the public, that the manufacture of his chronometers, watches, and clocks, is secured by three separate patents, respectively granted in 1836, 1840, 1842. Silver lever watches, jewelled in four holes, 6 gs. each; in gold cases, from £5 to £10 extra. Gold horizontal watches, with gold dials, from 8 gs. to 12 gs. each.

DENT'S PATENT DIPLIEDOSCOPE, or meridian instrument, is now ready for delivery. Pamphlets containing a description and directions for its use 1s. each, but to customers gratis.

NORTH WALES MINING COMPANY—

COUNTY OF MERIONETH.

Divided into 12,500 shares—limited to £10 each, and carried out upon

THE COST-BOOK SYSTEM,

With a deposit of £1 10s. per share.

OFFICES—No. 2, NEW BROAD-STREET, LONDON.

COMMITTEE OF MANAGEMENT.

EDWARD F. FENNELL, Esq., 32, Bedford-row.
EDWARD HARDING, Esq., *Manager*, 44, Great Ormond-street.
C. H. E. HARRISON, Esq., 35, Upper Bedford-place, Russell-square.
JAMES HARVEY, Esq., *Resident Manager*, Brynygwin, Dolgelly, North Wales.
J. M. MACDONNELL, Esq., M.P., 53, Manchester-street, Manchester-square.
WILLIAM HENRY ROUGH, Esq., Middle Temple.

Principal Mining Captain—Capt. W. Williams, of Praze, near Camborne, Cornwall.

Managing Clerk at the Mines—Mr. J. C. Goodman.

BANKERS.

In London—Messrs. Glyn, Halifax, Mills, and Co., Lombard-street.
In Wales—Messrs. Jones and Williams, Dolgelly, Merionethshire.

SOLICITORS.

In London—W. W. Fisher, Esq., 3, King-street, Cheapside.
In Wales—Messrs. Owen and Griffiths, Dolgelly, Merionethshire.

Analytical Chemist—Andrew Ure, Esq., M.D., F.R.S., F.S.A., Charlotte-st., Bedford-sq.

Purser and Secretary in London—W. T. Griffiths, Esq.

The mines proposed to be worked by this company, extend under a surface of above 1000 acres, and are situated in the neighbourhood of Dolgelly, in the county of Merioneth. They are held on lease from the Crown, and from two of the principal landowners of the county, at the usual royalty for terms, varying from 21 to 23 years, renewable on payment of a fine.

The affairs of the company will be carried on under the system known in Cornwall as the "Cost-book" System, and managed by a committee of management chosen from amongst the proprietors. The liability of the shareholders will be limited to the amount of the shares held by them respectively; which liability they can, under the "Cost-book" System, at any time determine by a relinquishment of their shares. And it is determined by a careful supervision of the expenditure, to ensure that economical management so essential to the success and prosperity of an undertaking of this description.

These mines comprise the following setts:—

No. 1.—TYDDYNYGLWADIS MINES.

Extending under a surface of about 265 acres, and held for a term of 21 years, at a royalty of 1-12th: they contain silver-lead and copper ores, of a very rich quality—samples of which have been assayed by Messrs. Johnson and Cock, Messrs. Johnson and Son, and other assayers—the result proving these mines to be extremely valuable.

No. 2.—CLOGAN MINE.——No. 3.—VIGRA MINE.

These two mines, extending under a surface of about 650 acres, are situated on two opposite mountains; and held on lease from the Crown for 21 and 23 years respectively, at a royalty of one-tenth. They contain copper ore yielding from 6 to 20 per cent. of pure metal; and some silver-lead ore of a very rich quality. Extensive workings have been made in both these mines, and much valuable ore has been taken out and shipped to Swansea. The lode is very rich and promising—the vein increasing in width, and the quality of the ore improving in value as the works are proceeded with.

No. 4.—DOLFRWYNOG MINE.

This mine has been well explored, and gives every indication of containing a very large body of copper ore. It extends under about 110 acres of land, and is held on lease for 21 years, at one-tenth royalty. The surface of this sett is so strongly impregnated with copper, that some time since a portion of the surrounding peat was taken up and burned; the result yielding a large per centage of metal, many thousand pounds' worth of which was sent to market. Samples of the ore taken from the different sinks and levels of this mine have been assayed by Messrs Johnson and Son, and other assayers, who certify that it contains at the rate of 5 to 20 per cent. of pure metallic copper.

Assays, by some of the principal assayers of the present day, of ores taken fairly and indiscriminately from the different mines, as will appear on reference to the prospectus of the company, testify to the richness of this mining property; and establish the fact, not only that copper and silver-lead ores, of the richest quality, exist in this locality, but that gold has been found in the gossans, as well as in combination with the other minerals; and, although it is not asserted that gold will be discovered in sufficient abundance to pay for its extraction alone, yet there can be no doubt that any quantity of the precious metal which may be obtained, must greatly augment the profit which may reasonably be expected, from an undertaking having for its primary object the working of copper and silver-lead ores, of so rich a quality as those contained in these mines.

The proximity of these mines to the sea—the port of Barmouth being only from five to eight miles distant, and a navigable river running from the base of the mountains to that port—admits of the ores being shipped, and the materials for the use of the mines landed, without incurring the heavy expense of land-carriage, &c. There is an abundant supply of water for the working of every description of machinery; and the mountainous character of the country affords an opportunity of fully working the mines by means of adit levels, which will unwater them, and at the same time admit of the ores being brought to the dressing-floors without the expensive auxiliaries of steam-power, so necessary in other parts of England, where the country does not furnish such natural facilities.

Under these favourable circumstances, and taking into consideration the extent of the grants, amounting to above 1000 acres of land, admitted by geologists, and proved by experience, to be so rich in mineral produce; together with the advantages derivable from the natural facilities of the country, and the cheapness of labour, it is reasonable to anticipate a very large return for a comparatively small outlay, as well as an almost unlimited power of increasing the profit by a further disbursement of capital in the undertaking.

It is proposed by the issue of shares to raise a capital to work these mines; and in consequence of a large portion of the purchase money being contingent upon the success of the undertaking, a deposit of £2 10s. per share will be sufficient to commence operations; while it is not anticipated that more than £3 10s. additional upon each share (to be called for at future periods, and in such amounts as may be necessary, due notice being given of such calls), will be required to carry on the objects of the company. The fact of the mines having been already opened at a considerable outlay, yielding notwithstanding a large profit, and of there being now a considerable quantity of ore at the months of the levels, in a partially dressed state, warrants the strongest expectations that the returns upon the capital subscribed will be almost immediate.

Reports of the present state and capabilities of the several mines have been made by eminent mining engineers; but as they are too lengthened to be comprised within the limits of a prospectus, printed copies may be had on application at the offices of the company, 2, New Broad-street, London, where specimens of the ores may also be inspected.

Persons desirous of visiting the mines, can do so on applying to the purser, at the offices of the company; or to James Harvey, Esq., Brynygwin, Dolgelly, North Wales, who will give letters of introduction for such purpose.

Application for prospectuses, copies of the reports, and shares, to be made to the purser, at the company's offices; the solicitors—W. W. Fisher, Esq., 3, King-street, Cheapside, London; Messrs. Owen and Griffiths, Dolgelly, Merionethshire; and the following brokers and agents:—Mr. B. Rankin, 23, Tokenhouse-yard; Messrs. Watson and Cuell, 1, St. Michael's-alley, Cornhill; and Mr. C. W. de Bernardy, No. 46, Leicester-square, London; Messrs. Thomas Cardwell and Sons, and Mr. J. Fernyhough, Manchester; Mr. P Kempson, Birmingham; Mr. C. S. Edsall, Truro; Mr. James Cunningham, jun., Bristol; and Capt. W. Williams, near Crowan, Cornwall.—Copies of the prospectus can also be had at the office of Mr. Henry English, mining engineer, 25, Fleet-street; and at the office of the *Mining Journal*, 26, Fleet-street, London.

BY HER MAJESTY'S LETTERS PATENT.

BRUNTON'S ORE-DRESSING FRAME—These FRAMES,

for DRESSING TIN, COPPER, and OTHER MINERALS, having been in use, and given satisfaction, on several mines, during the last two years, the PATENTEE begs to call the attention of all Adventurers and Mine Agents to the great advantages, both as regards economy of labour and the great increase of mineral obtained by their adoption, as

THE FOLLOWING TESTIMONIALS WILL CERTIFY:

Penzance, Feb. 6, 1847.

Two of Mr. Brunton's Frames have been at work at Wheal Gray Mine about six weeks. From the reports of the agents, as well as from our own observation, we have reason to believe, that, by the use of these Frames, there will not only be a great saving of labour, but that the work will be done better than by the common frames.

THOMAS BOLITHO & SONS.

Ward House, Beer, near Tavistock, Nov. 10, 1846.

MY DEAR SIR,—I have much pleasure in bearing testimony to the utility of your Patent Frames, which I look upon as one of the greatest improvements, in tin dressing particularly; and have no doubt of their answering for returning lead and copper, where the ore is obliged to be reduced to a small size. The frames answer well at Tincroft Mines; and I am desirous (as the inclosed offer will show) to introduce them at our other tin mines, and the Tamar-head Silver Mines. Yours, very truly,

Mr. Wm. Brunton, jun. P. N. JOHNSON.

Cook's Kitchen Mine, Nov. 19, 1846.

SIR,—We have had your Patent Frames working in this mine for the last 18 months—during which time I have had them severely tested; and am happy to inform you, that I have found them, in every way, superior to the old method of dressing; and I am convinced, that it is to the interest of mines in general to use them.—I am anxious to have the last four I ordered erected as soon as possible. I am, Sir, your obedient servant,

Mr. Wm. Brunton, jun. JOSEPH VIVIAN.

St. Ives Consols, Dec. 7, 1846.

DEAR SIR,—Your Patent Frames have been working in this mine for 18 months, and I am happy to bear my unbiassed testimony to their utility. They are a very great improvement, in tin dressing, on the old method; and I am convinced, if your Frames were in general use in this county, the saving in labour would be considerable, and an increase of mineral obtained in the first process. I am, dear Sir, yours respectfully,

Mr. Wm. Brunton, jun. RICHARD KERNICK.

Birch Tor Mines, Dec. 3, 1846.

MY DEAR SIR,—Your Frames having been at work for the last four months on this mine, I have much pleasure in bearing testimony to their utility in tin dressing. We find them very superior to any thing else now in use, both as regards dispatch and cheapness; and we also find the tin cleaned by them to be of a much higher produce. I have also tried copper slimes on them, and find they are equally as beneficial in dressing these ores as they are in the dressing of tin. Yours very truly,

Mr. Wm. Brunton, jun. R. EDWARDS.

Camborne, Nov. 26, 1846.

DEAR SIR,—We have examined your Frames at Cook's Kitchen, and are of opinion, that they are vastly superior to any other for the purpose of cleaning ores; and will, doubtless, supersede every other now in use. They are neat, well constructed, scientific-looking machines, and can be worked at much less cost, and render the ores of higher produce, than any other we have seen. Yours truly,

NICHS. VIVIAN,
Mr. Wm. Brunton, jun. NICHS. VIVIAN, Jun.

Carn Brea Mines.

We, the undersigned, have great pleasure in testifying to having used Mr. Brunton's Patent Frames on these mines for the last eight months; and also to the great saving effected by them in the dressing of our tin ores.

JAMES MINERS,
NICHOLAS LENTEN,
MATTHEW ROGERS, Sen.
WILLIAM WEBB,
WILLIAM ROBERTS,
JOHN DAW,
JOHN VIVIAN.

LICENSES can be obtained, and all information given, upon application to the PATENTEE, POOL, NEAR REDRUTH.

BIRMINGHAM AND OXFORD JUNCTION RAILWAY.

SECOND CALL OF FIVE POUNDS PER SHARE.

The directors having passed a resolution, requiring the shareholders to PAY a further CALL of FIVE POUNDS on each share held by them respectively, on the 19th day of April, 1847; Notice is hereby given, that the shareholders are required to PAY such CALL, on the day appointed, to one of the undermentioned bankers; and, in default thereof, they will be charged with interest, at the rate of 5 per cent. per annum from that date, until the said call is actually paid.

The BIRMINGHAM BANKING COMPANY, } Birmingham.
Messrs. ATTWOODS, SPOONER, & Co., }

OR AT THEIR LONDON AGENTS:

Messrs. JONES LOYD & CO., for the Birmingham Banking Company.
Messrs. SPOONER, ATTWOOD, & Co., for Messrs. Attwoods & Co.; and at
Messrs. MOSS & CO.'s Liverpool, for the Birmingham Banking Company.

A circular will be sent to each shareholder, which must be deposited at the bankers when the call is paid. By order of the board of directors,

JOHN WILLIAM KIRSHAW, Secretary.

34, Bennett's-hill, Birmingham, Feb. 27, 1847.

CALEDONIAN RAILWAY—LOANS ON DEBENTURES.

—The CALEDONIAN RAILWAY COMPANY are prepared to RECEIVE TENDERS of LOANS on DEBENTURES, in sums of not less than £500, for three or five years, bearing interest at the rate of 5 per cent. per annum, payable half-yearly, in Edinburgh, Glasgow, London, Liverpool, Manchester, or Bristol.

Tenders to be addressed to this office.—Parties may also communicate personally with Messrs. Foster and Braithwaite, 66, Old Broad-street, London.

By order of the directors, D. RANKINE, Treasurer.

Caledonian Railway Office, 122, Princes-street, Edinburgh, March 26, 1847.

CALEDONIAN RAILWAY.—Notice is hereby given, that an EXTRAORDINARY GENERAL MEETING

of the shareholders of the CALEDONIAN RAILWAY COMPANY will be HELD within the Royal Hotel, Edinburgh, on Monday, the 26th day of April next, at One o'clock afternoon, for the purpose of considering, and, if thought expedient, of sanctioning—

First,—An agreement for a lease, or guarantee, of the Dundee and Perth Railway, and its branches, by this company.

Second,—An agreement for a lease, or purchase, of the Wilsontown, Morningside, and Coltness Railway, by this company; and also of authorising the raising of a further sum of money on mortgage or bond, under the powers of the "Caledonian, Polloc, and Govan, and Clydesdale Junction Railways Amalgamation Act, 1846."

And, for the further purpose of considering, and, if approved of, sanctioning, the following Bills, now before Parliament—the drafts of which will be submitted to the meeting, in compliance with the Standing Orders of the House of Lords—viz.:

(1.)—A Bill, or Bills, to enable the Caledonian Railway Company to extend their station in Edinburgh, and to make branch railways to Granton, to the Edinburgh and Glasgow Railway, to Wilsontown, to Fauldhouse, and to Biggar and Broughton.

(2.)—A Bill to enable the Caledonian Railway Company to extend their railway across the River Clyde, at Glasgow, and to form a station in that city.

(3.)—A Bill to enable the Caledonian Railway Company to make a branch railway from the Glasgow, Garnkirk, and Coatbridge Railway to Glasgow, and to enlarge the station in that city.

(4.)—A Bill to enable the Caledonian Railway Company to make certain branch railways in the counties of Dumfries and Camberland.

(5.)—A Bill to enable the Caledonian Railway Company to make an extension of the Motherwell Branch of the Clydesdale Junction Railway to Auchinheath Mineral Field, with branches therefrom.

(6.)—A Bill to enable the Caledonian Railway Company to make branches from the Clydesdale Junction Railway to the Douglas and Lesmahagow Mineral Fields, and to Strathavon.

(7.)—A Bill to effectuate the sale of the Wishaw and Coltness Railway to the Caledonian Railway Company.

(8.)—A Bill to enable the Caledonian Railway Company to take on lease a portion of the Glasgow, Dumfries, and Carlisle Railway.

(9.)—A Bill to amalgamate the Glasgow, Paisley, and Greenock Railway with the Caledonian Railway, and to authorise the raising of additional money for the said last-mentioned company.

(10.)—A Bill to effectuate a lease of the Glasgow, Barrhead, and Neilston Direct Railway, and the Glasgow Southern Terminal Railway, to the Caledonian Railway Company, and to authorise the said company to raise money for these and other purposes.

By order of the directors,

J. J. HOPE JOHNSTONE, Chairman.

Caledonian Railway Office, 122, Princes-street, Edinburgh, March 23, 1847.

WEST FLANDERS RAILWAYS COMPANY.—NOTICE OF CALL.

—Notice is hereby given, that the directors have made a further CALL of TWO POUNDS per share on each and every share in this undertaking, and that the same is made PAYABLE on the 29th day of March inst. The proprietors are requested to pay the same, on or before the said 29th day of March, to Messrs. Glyn, Halifax, Mills, and Co., bankers, Lombard-street, London.

Interest, at the rate of 5 per cent. per annum, will be charged on all sums remaining unpaid after the said 29th day of March; and if any call shall remain unpaid after one month from that date, the SHARES will become absolutely forfeited, according to the statutes of the company.—Dated this 5th day of March, 1847.

(Signed) W. P. RICHARDS, President.

11, King William-street, Mansion-house. WILLIAM JESSE, Secretary.

PATENT METAL-CORED RAILWAY SLEEPER COMPANY.—NOTICE.

—The applicants for shares in this company are hereby informed, that the Deed of Settlement of this company is now before the Registrar of Joint-Stock Companies for approval—that the company will be forthwith completely registered, and applicants will then be apprised of the number of shares allotted to them.

1, Guildhall Chambers, Basinghall-street, March 31. C. R. READ, Chairman.

PNEUMATIC ENGINE AND SAFETY RAILWAY CARRIAGE COMPANY.

UNDER ROYAL LETTERS PATENT.

Capital £500,000, in 50,000 shares, of £10 each.—Deposit 3s. per share.

The first call will not exceed 10s. per share.

The object of this company is to introduce a new system of propulsion, which will supersede the necessity of steam for railways, stationary engines, navigation, and in all other cases where motive-power is required, by the substitution of a new means of power, derived from the atmosphere alone, without the use of lineal tubes, stationary engines, or local machinery of any kind.

Prospectuses, with full details, will be ready in a few days, and may be obtained of Messrs. Wm. Barry and Co., 7, Birchin-lane, Cornhill, and Messrs. Lassond and Co., Hall of Commerce, by whom applications for shares will be received in London.

ELECTRO-MAGNETIC TELEGRAPH—NOTT'S PATENT.

PATRONISED by H. R. H. PRINCE ALBERT, the LORDS OF THE ADMIRALTY, &c.

The proprietors of Nott's Patent beg to inform all RAILWAY COMPANIES, that they are ready to TREAT with them for the ERECTION of the TELEGRAPH, on any length of railway, on the most reasonable terms. This instrument, from its simplicity of construction and certainty of action, is, after the most severe test, proved to be the most useful and efficient instrument of the kind ever yet invented, as reported on by Dr. Faraday, Capt. Brandreth, Professor Brande, Dr. Bachhoffner, &c., and, in fact, all the science of the country.

It may be seen in daily operation on the London and North-Western Railway, where it is in practical use, between Blisworth and Northampton stations; also, at the Telegraph Office, 2, Royal Exchange-buildings, where all particulars may be obtained, and the report seen.

IMPORTANT TO ENGINEERS, MANUFACTURERS, RAILWAY AND STEAM-BOAT COMPANIES.

Messrs. W. & C. MATHER beg to call the attention of the ABOVE PARTIES to their IMPROVED PATENT ELASTIC METALLIC PISTONS.

The PRINCIPAL FEATURE and ADVANTAGE of THIS IMPROVEMENT is—

1. Its great ELASTICITY and SELF-ADJUSTING PROPERTIES, which enable it to yield to any inaccuracy of the cylinder, whether oval or tayer, and to move with the least possible friction.

2. Its extreme SIMPLICITY and LIGHTNESS, consisting of only two pieces of metal, having the vertical and lateral pressure in due and proper proportion, independent of each other.

3. It takes the LEAST possible SPACE, and is well adapted for air and water-pumps, as it allows of a larger water way.

Messrs. W. & C. MATHER feel confident that it is the BEST ELASTIC METALLIC PACKING yet known, for the above reasons.

Models may be seen at the Salford Iron-Works, Manchester; at W. Barker's, engineer, Newton-Moor; and also at J. Mather's, engineer, Beaufort-street, Chelsea, London.

TO ENGINEERS AND BOILER-MAKERS.

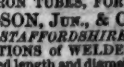
LAP-WELDED IRON TUBES FOR STEAM-BOILERS.

THE BIRMINGHAM PATENT IRON TUBE COMPANY,

43, *CAMBRIDGE-STREET, BIRMINGHAM, & SMETHWICK, STAFFORDSHIRE*, MANUFACTURE TUBES under an exclusive license from Mr. Richard Prosser, the patentee. These tubes are now very extensively used in the boilers of marine and locomotive steam-engines in England and on the continent—are stronger, lighter, cheaper, and more durable than brass or copper tubes, and warranted not to open in the weld. They may be fixed in the boilers without ferules, and can be taken out and refixed without additional trouble or expense.—Address, 43, Cambridge-street, Crescent, Birmingham.

LONDON WAREHOUSE,

68, *UPPER THAMES-STREET.*



TO ENGINEERS, BOILER-MAKERS, AND OTHERS.—

LAP-WELDED IRON TUBES, FOR STEAM-BOILERS.

W. H. RICHARDSON, JUN., & CO., DARLASTON,

STAFFORDSHIRE,

MANUFACTURE all DESCRIPTIONS of WELDED WROUGHT-IRON TUBES, for STEAM, GAS, &c., of any required length and diameter, on the new and unequalled principle of Mr. J. Roose's recent invention (patented August, 1846).—Address as above.

London:—Printed and Published, weekly, by HENRY ENGLISH, at the Office, No. 26, FLEET-STREET, in the city of London, where all Communications and Advertisements are requested to be forwarded—addressed to "the Editor"—post-paid. *April* 10, 1847.

*** It will at all times save much delay and inconvenience, if communications are directed simply To THE EDITOR, *Mining Journal Office*, 26, FLEET-STREET, LONDON.

And POST-OFFICE ORDERS, &c., must be made payable to WILLIAM SALMON MAXWELL, as acting for the proprietors.